

# THE ILLUSTRATED LONDON NEWS.



## ROSS'S

*Belfast Ginger Ale*

Ross's Royal Lime Juice Cordial we believe will be found as acceptable as Ross's Ginger Ale.

By Appointment Cyder makers to  
H.M. KING GEORGE VI H.M. QUEEN MARY  
William Gaymer & Son Ltd. Attleborough & London

## Gaymer's

CYDER

*Famous for over 300 years*

## McVITIE & PRICE

*Biscuits of Highest Quality*

EDINBURGH • LONDON • MANCHESTER



BY APPOINTMENT TOILET SOAP MAKERS TO H.M. KING GEORGE VI

## Brounley

for the bath

ESSENCE • CRYSTALS • POWDERS • FINE SOAPS



A cup of  
**HARDEN'S TEA**  
—“just what the DOCTOR ordered”

Harden Bros. & Lindsay Ltd., 121 Cannon Street, London, E.C.4

## Bass

Ever the Englishman's drink



## GREYS are great CIGARETTES

3 WAYS OF USING  
**VAPEX**  
FOR COLDS

- ▲ Vapex Inhalant for handkerchief or pillow.
- ▲ Vapex Inhaler for pocket or handbag.
- ▲ Vapex - Volatol—the new chest rub.

V271



ALL CLASSES OF INSURANCE TRANSACTED

## UNITED BRITISH

INSURANCE COMPANY Ltd.

BYRON HOUSE, 7/9, ST. JAMES'S STREET, LONDON, S.W.1



## Join the Sun . . . on a ski run in **FRANCE**



In the mountains of France there is all you require for your winter sports holiday . . . ever more numerous hoists leading to well-prepared runs . . . the best tuition, uniform throughout the country, at most reasonable cost . . . hotels of every grade (especially low rates in January) . . . resorts at various altitudes . . . plentiful food presented with care and imagination.

Consult your Travel Agent or the  
**FRENCH NATIONAL TOURIST OFFICE**  
179 PICCADILLY, LONDON, W.1.

## HOUSEHOLD & PERSONAL EXPENSES CONTROL

by

## Cheque Book



It is easy to open an account with  
National Provincial Bank  
Any Branch Manager will explain  
the simple procedure

## NATIONAL PROVINCIAL BANK LIMITED

**NPB**  
for service

*lather and  
lotion in one*



*combine to shave  
all of us better . . .*

Ingram's solves the oldest lather problem — how to pave the way for the razor and remove sting and drag. While the lather softens the bristles the lotion tones up the skin to give you the coolest, smoothest shave ever — what a comfort this combined operation is!

**Ingram's combines its own face lotion**

A PRODUCT OF BRISTOL-MYERS, London & New York

50/2/5

## Fine Wines from South Africa

**VELDT  
BURGUNDY**  
a soft, well-  
rounded wine  
**PAARL  
AMBER  
HOCK**  
clean, fresh  
fragrant  
8/- a bottle

*-for  
gracious  
living*



SHIPPED BY  
**BURGOYNE'S**



# It's the new T.D. Midget!

Yes.... it's the T.D. series M.G. Midget with new "plus" features.... features that include coil-spring independent front-wheel suspension, latest piston-type shock absorbers, positive rack and pinion steering and even more powerful Lockheed brakes. Here is a sports car with all the character and liveliness of its famous forebears—plus easier handling and smoother, more comfortable riding; built in the true tradition of "safety fast."



*Safety fast!*

£445.0.0 EX WORKS PLUS  
£124.7.3 PURCHASE TAX



THE MG CAR COMPANY LIMITED, SALES DIVISION, COWLEY, OXFORD

Overseas Business: Nuffield Exports Ltd., Oxford and 41 Piccadilly, London, W.1  
London Showrooms: University Motors Ltd., 7, Hertford Street, W.1.



THE

# Eagle

BY GOODYEAR

**"Built for the longest, safest  
working life of any car tyre"**

—say Motorists and Tyre Suppliers alike

- \* The tread rubber is tougher, more shock-resisting than ever before.
- \* The improved All-Weather Tread — with its new Stop-Notches for quicker, safer stops — resists every direction of skid throughout the tyre's longer life.

- \* Wider, flatter tread area grips more road for more traction, and wears more slowly.
- \* Handsome buttressed side-walls provide protection from kerb damage, and make cornering steadier than you've ever known.

*You can trust*

# GOOD YEAR

FOR LONG LIFE AND LASTING WEAR







**DRY SACK**  
REGD.

**WILLIAMS & HUMBERT'S**  
*World Famous Sherries*  
PRODUCE OF SPAIN

**WALNUT BROWN**  
REGD.



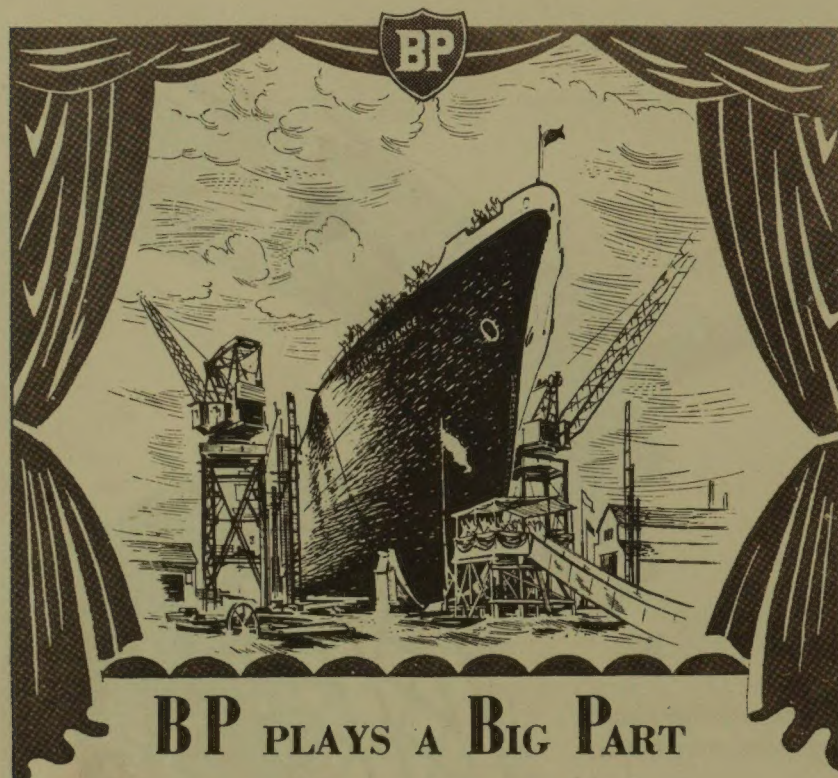
*Something you must look into...*

**higher mileage**

Unless you get to know the new Avon H.M. Tyre — you'll never know what you're missing in extra miles — extra safety and extra comfort. Designed especially to withstand the severe wear imposed by modern high performance cars, its tread is not only far deeper — but wider and flatter too. Its casing is immensely strong with buttressed shoulders and, with the care and quality that go into its making, it is undoubtedly the finest tyre ever produced in this or any other country.

*More miles in greater safety*

The  
**AVON**  
H.M.



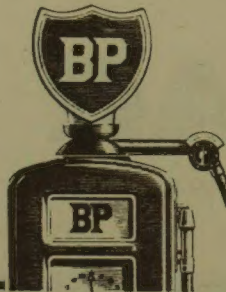
**BP**

**BP PLAYS A BIG PART**

**IN BRITISH PROGRESS**

Last year 14 new tankers joined the BP fleet from British shipyards — **THUS HELPING TO END PETROL RATIONING.** The fine new 16,000 ton tanker pictured above is one of 134 in the British Tanker Company fleet that carry the products of Anglo-Iranian Oil Company. 25 more, including 6 giants of 28,000 tons, will be delivered by the end of 1952.

The vast resources of  
**ANGLO-IRANIAN OIL COMPANY, LTD.**  
are behind the B.P. trade-mark — your guarantee of Better Performance when Better Petrol can be made again.



**GRENFELL**

GOLF JACKETS  
& SPORTSWEAR

help your game *materially*



*Worn and recommended by*

*Henry Cotton*



**HAYTHORNTHWAITE & SONS LIMITED**  
LODGE MILL · BURNLEY · LANCs



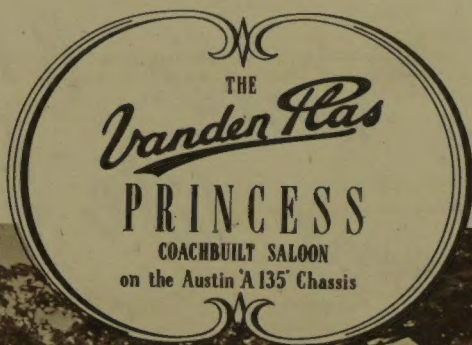


# 'Five-Star' Motoring is Coming

*The Best at Lowest Cost*

**Ford**

O F D A G E N H A M



*A car that will not date . . . .*

*The Austin A135 "Princess" Saloon and Touring Limousine models have upheld dignity and individuality and established a refinement for comfort and elegance yet to be surpassed.*

"Princess" Saloon £1,821.11.8, incl. Purchase Tax. Touring Limousine £1,981.6.1, incl. Purchase Tax.

VANDEN PLAS (ENGLAND) 1923 LIMITED, KINGSBURY WORKS, KINGSBURY, LONDON, N.W.9 Telephone: COLINDALE 6171-2



## THE VICKERS VISCOUNT

*B.E.A. operate the first gas-turbine airliner to go into scheduled passenger service.*

*"... an historic achievement in commercial design and construction. The combination of Vickers and Rolls-Royce has indeed brought about a technical triumph of the first order." "Aeronautics"*

*The Viscount is powered by Rolls-Royce "Dart" propeller-turbine engines.*

# ROLLS-ROYCE *Aero*

E N G I N E S

FOR SPEED AND RELIABILITY

ROLLS-ROYCE LTD · DERBY



**Jack  
BARCLAY**  
LIMITED

*The Largest Official Retailers of  
ROLLS-ROYCE & BENTLEY  
Hanover Square, W.1 Mayfair 7444  
Berkeley Square, W.1 Grosvenor 6811*

Service Works: Lombard Road, Morden Road, Merton, S.W.19.

LIBerty 7222



# "Imperial—what?"



It is an unusual name! IMPERIAL LEATHER Toilet Soap  
does arrest attention, not only because of its name  
but because of its qualities — the freedom of its lather;

the perfume that women find so subtle  
and men so discreet. Use IMPERIAL  
LEATHER once, and the name will always  
be remembered with pleasure and satisfaction.



## Cussons FAMOUS TOILET SOAP IMPERIAL LEATHER

AND OTHER TOILET LUXURIES OF EXQUISITE CHARACTER



*'Where there's BMK  
There's life!'*

There's extra-long life in the springy resilient Scotch Blackfaced wool that goes into every BMK carpet and rug together with other selected springy wools. These are woven by traditional craftsmen of Old Kilmarnock, and permanently proofed against moths by a new process. You know what you're getting when you buy BMK.

**MOTHPROOF  
CARPETS AND RUGS**

*'TAKE A LOT OF BEATING'*

BLACKWOOD MORTON KILMARNOCK



# THE ILLUSTRATED LONDON NEWS

The World Copyright of all the Editorial Matter, both Illustrations and Letterpress, is Strictly Reserved in Great Britain, the British Dominions and Colonies, Europe, and the United States of America.

SATURDAY, SEPTEMBER 16, 1950.



THE OLD SOLDIER-STATESMAN WHOSE DEATH "LEAVES ALL THE WORLD THE POORER":  
FIELD MARSHAL JAN CHRISTIAAN SMUTS, O.M.

The death of one of the greatest men of our time, General Smuts, took place on Sept. 11, at his farm near Pretoria. General Smuts, who celebrated his eightieth birthday only a few months ago, had been ill since May 28 and had recently been suffering from a former heart strain following influenza. Field Marshal Smuts, who preferred to be known as General Smuts, was the first

man of Dominion birth to attain that rank. In his youth he engaged in a war against the Empire for the independence of the Boer Republic; he later commanded Imperial Armies in the field and became Prime Minister of South Africa; in his old age he led his country and commanded its forces in World War II. His death is mourned throughout the world.

[Photograph by Karsh of Ottawa.]





By ARTHUR BRYANT.

A few years before the War, lecturing at the R.A.F. Apprentices' School at Halton, I made use of a phrase that was more true than I knew. I had been speaking of the close relation—one then so insanely forgotten by our leading intellectuals—between the historic British command of the seas and the development, preservation and expansion of our liberties. After outlining the naval occasions by virtue of which it had been won and maintained, I looked up from my notes and, on the spur of the moment, added, "Gentlemen, it may now depend on you!" Three years later, in the Battle of Britain, the truth of my words was most dramatically proved. The R.A.F., in that epic autumn, saved this country and, with it, the world's freedom. It did so again in those laborious years of preparation and endurance before the assault on Hitler's western wall, when night after night the crews of Bomber Command went on their perilous missions, suffering losses in proportion to their strength unparalleled in any sustained successful operation known to history yet winning thereby that stranglehold on the aggressors' production-centres and communications without which D-Day would have been a shambles and a disaster and the flying bombs would have destroyed London and given the Nazis the key to Europe's permanent enslavement.

We can never be sufficiently grateful. The Royal Air Force in its thirty years of brief life has won its place in the English heart beside the Royal Navy for the service it has done in preserving all we love and value. The strains of Walford Davies' noble R.A.F. March arouse something of the same associations and emotions as that noble air of "Sunset" played by a Royal Marines band at the highest moment of naval ceremony. They remind us, with a sense of pride, pity and tenderness too deep for words, of the valour, sacrifice and unselfishness and imperishable glory of those who, transcending their own human needs and inclinations, laid down all they loved for their country and gave her existence continuance and her beliefs meaning. They commemorate all that was beautiful in those freely-given and dedicated lives, the stricken but immortal love of their comrades and dear ones, the hours of life and happiness and preparation that had gone to make them what they were and, in doing so, to serve and save England. And they remind those who hear them that in the service of England there is no finality or discharge, that life for every one of us has a purpose, and that its highest achievement is sacrifice—the key that alone opens the door to the truest and enduring aspirations of men. For, if their sacrifice has any meaning, it is that the end of life is not material satisfaction but mastery over self in the cause of something more satisfying and lasting than self.

Yet such spiritual greatness can only be achieved at a heavy price of intense human suffering, both material and mental, endured both by the giver of the initial sacrifice and by those who love and depend on him. The Royal Air Force Benevolent Fund exists to reduce so far as possible the extent of such unavoidable suffering and loss. Founded in 1919 by Marshall of the Royal Air Force Lord Trenchard, the man who more than any other was responsible for the creation of the service that saved England in 1940, it offers assistance to all R.A.F. personnel and their dependents who stand in need of it. Anyone commissioned

or enlisted in the R.A.F. or W.R.A.F. in whatever capacity is qualified for consideration by the fact of his or her service, whether past or present. Those applying in writing for aid to the Headquarters of the Fund at 67, Portland Place in London, are interviewed there, or, more often, locally, by voluntary or stipendiary representatives specially trained for this work—one demanding, as it does, an infinity of tact, sympathy and business-like clarity. Their needs



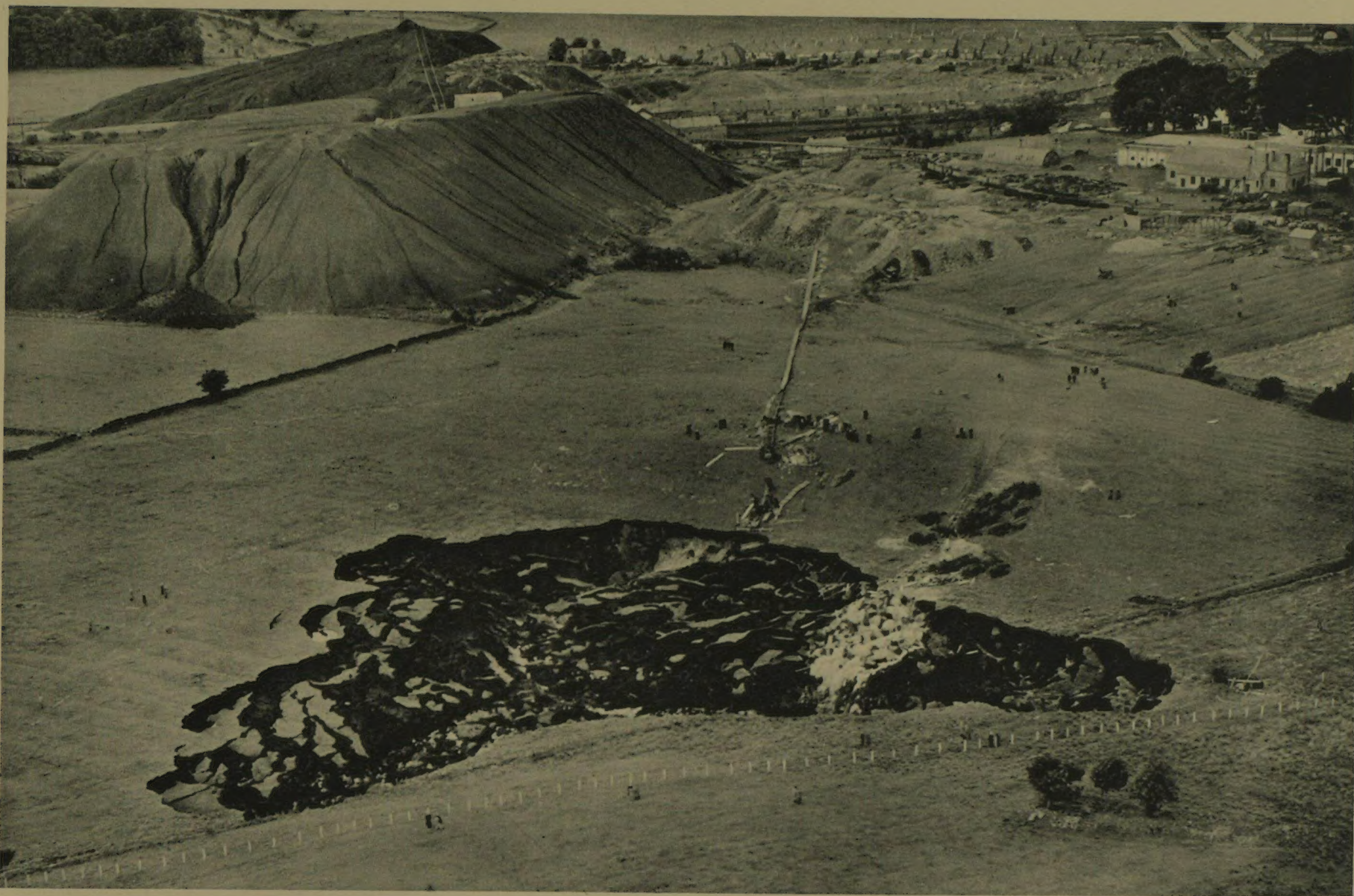
TAKING OVER COMMAND of *Magpie*: H.R.H. THE DUKE OF EDINBURGH SEEN WELCOMED ABOARD BY COMMANDER HARPER (TOP); AND IN CONVERSATION WITH HIM (CENTRE); BEFORE THE OFFICERS WERE PRESENTED TO HIM (BOTTOM).

are then assessed. The Fund's capital assets, subscribed by patriotic and grateful men and women in civil life and by a majority of serving officers and other ranks of the R.A.F., to-day total over five millions sterling, and are supplemented every year by new subscriptions by the Public. But after two great wars, entailing untold suffering and hardship on R.A.F. personnel and those connected with them, the unavoidable demands made on the Fund always exceed its revenues. Last year nearly 3 quarters of a million was spent on all forms of assistance to serving and ex-Service members of the R.A.F. and W.R.A.F. and their dependents—a sum more than £300,000 in

excess of income during the same period. It is essential, therefore, if the Fund is to continue to fulfil its great purpose, that the Public should subscribe to it liberally. It has a particular opportunity to do so at the present moment in Battle of Britain Week, now taking place on the tenth anniversary of that miraculous victory. Those who reflect—as many well may and have cause to—that the financial burdens they are called upon to shoulder at the present time are crippling and almost overwhelming, can hearten themselves for the payment of this debt of obligation by the remembrance that, but for the R.A.F.'s sacrifice and triumph, they would have to-day no freedom of choice of any kind, economic or otherwise.

The work that the Fund performs is of many kinds: grants or loans in time of sickness or convalescence or of great financial stringency, in providing tools and working equipment, in meeting maternity and similar expenses, in redeeming pawned articles and pressing debts incurred by virtue of past services, in the education of children and the provision of housing. The educational work of the Fund is among its most important activities and last year accounted for more than a tenth of its total expenditure. It is the Fund's policy that children whose fathers were killed or died whilst serving with the R.A.F. should receive education of the standard they would have been given had they not been orphaned. This help is continued from earliest schooldays to the University if the child shows real promise. Among those benefitting from it at the present time—and I see him after every term—is a boy whose father, formerly an apprentice at the great R.A.F. Apprentices School at Halton, to which he had gone, like so many of its members, from a fine provincial Grammar School, fought as a sergeant-pilot in the Battle of Britain and won the D.F.M. in its course. Later this gallant young pilot was commissioned, rose to the rank of Flight-Lieutenant and won the D.F.C. He was killed towards the end of the War flying Mosquitoes. He left behind a widow and two children, a boy and a girl, as well as a devoted mother and father whose only son he was—the latter himself a most faithful servant of England who had served in all three Services, as a Regular soldier before 1914, as a Chief Petty Naval Officer during and after the first World War, and, at an advanced age, as a technical Sergeant Instructor in the R.A.F. during part of the late War. During the Battle of Britain the hero of this story—one of many similar ones which together helped to change the course of human destiny—was shot down in flames and left unconscious, covered in oil, near his aircraft. He was subsequently retrieved and found to be suffering from severe shock and bruises but not, by some miracle, seriously wounded. In the stress of that time, instead of being taken to hospital, he was sent home to his parents on convalescent leave to recover. After twenty-four hours at home, deeply grateful for the peace and rest and love by which he found himself surrounded, he quietly told his father and mother that his comrades were fighting the Battle of Britain without him and that he must return. Next day, though anything but fit, he reported for duty and insisted on resuming operational flying. It is to repay some small part of the debt that we owe to such men that the R.A.F. Benevolent Fund exists and that its support is a permanent duty of all who love their country.





(TOP) THE SUBSIDENCE OF WATERLOGGED LAND WHICH BURST THROUGH INTO THE UNDERGROUND WAYS OF KNOCKSHINNOCH-CASTLE COLLIERY AND TRAPPED 129 MINERS, SHOWING (RIGHT) THE TRUCKS, TIMBER AND RUBBLE THROWN DOWN IN AN ATTEMPT TO STOP THE FLOW; AND (BELOW) SOME OF THE RESCUED BEING BROUGHT TO THE SURFACE, AFTER A RESCUE LASTING FIFTY-THREE HOURS.

#### AN EPIC COLLIERY RESCUE : THE GREAT KNOCKSHINNOCH SUBSIDENCE, AND SOME OF THE RESCUED MINERS.

At 8 p.m. on Sept. 7, a huge subsidence of waterlogged land blocked the main underground road of Knockshinnoch Castle Colliery, Ayrshire, trapping 129 men. A great rescue operation began and at midnight, Sept.

7/8, reached 116 of the trapped men. Owing to gas it was impossible to move them until early on Sept. 10, after 53 hours incessant labour by hundreds of rescuers.



## A WINDOW ON THE WORLD.

### THE NORTH KOREANS STRIKE A GREAT BLOW.

By CYRIL FALLS,

*Chichele Professor of the History of War, Oxford.*

On September 1 the Communist Army of North Korea launched the heaviest offensive witnessed since the first phase of the invasion. The first results achieved were astonishingly great, far exceeding those of any of the numerous attacks carried out since the defence of the "river line" of the Nakdong began. This was in the main due to the fact that the assault was carried out in far greater strength and on a broader front than heretofore. Another factor was the fine weather, which had diminished the flow of the Nakdong and made it easily fordable almost everywhere; but the deepest initial penetration was effected, not across the river, but further south, beyond the big bend. Since August 17, when the enemy gained a success and seemingly had Taegu at his mercy, but failed either in resolution or for want of means, the western flank had been immersed in a quietude broken only by local actions. The chief North Korean attacks during the intervening period took place in the north, at Pohang and further inland. Some of these won success to begin with against South Korean forces; but the enemy showed no outstanding resolution and was as a rule quickly brought to a halt, without having seriously embarrassed the defence or gained any vital positions.



CONSTRUCTING AN UNDERWATER CAUSEWAY FOR THE UNITED NATIONS FORCES ACROSS A TRIBUTARY OF THE NAKTONG RIVER: SOUTH KOREAN LABOURERS CARRYING LARGE BLOCKS OF STONE.

The United States command was aware that the North Koreans were building up strength and organising a new offensive from the west. This had, in fact, been expected for over a week. The delay seems to have been largely due to the attacks of the allied air forces on the enemy's lines of communication. Since reaching the Nakdong he has never made use of tanks in as great strength as before. The shortage of tanks was probably not due in the main to his losses; he has lost a considerable number, but we know also that he has received plenty more, including a large consignment from Dairen. Difficulties of supply and maintenance have been the chief cause of his troubles. However, as has been proved, he was by no means wasting his time. He assembled not only a large force of troops but also a big supply of ammunition for the new offensive. Prisoners, an unusually big haul taken in the fighting about Haman, stated that food was short and bad; but these hardy troops can fight well on low rations. In the course of one morning they punched a hole said to be four miles wide and eight miles deep between the U.S. 25th Division in the south coast zone and the 2nd Division on its right. Further north they crossed the Nakdong at about seventeen points. The river line ceased to exist for at least 20 miles; new positions taken up by the defence were in some cases ten miles to the east; and several American units were cut off and partially or wholly enveloped.

Counter-attacks were quickly mounted. Haman, lost at dawn, was recovered by dusk on the 1st. On the 2nd, a day on which renewed attacks by the enemy were expected, the allies, on the contrary, went over to the offensive, and a considerable depth of ground was recovered by their counter-attacks. In the south the defence of Masan was, for the time being, assured. Further north, Yongsan was regained. On the coast an advance was carried out north of Pohang; enough, it was reported, to make the place safe. (It is to be noted that the Americans are sensitive to threats to Pohang. Their greatest danger lies further south, but they evidently want to preserve Pohang as a port of entry, and it may become significant later on.) For the first time the General Patton tank, a very heavy cruiser with a 90-mm. gun and a great improvement in appearance on the ugly Pershing, went into action. It was comforting to my mind that these tanks were first employed on the northern front, with South Korean infantry. It did not seem that anxiety for that part of the front which faced westward could be as acute as correspondents' reports seemed to indicate.

As I write, I can only assume that the front will at worst be generally stabilised once more, and it may even be that the enemy's effort will have exhausted him, in which case events may be more favourable. The allied situation is now covered in secrecy to a greater extent than before. I think rightly, and there has been no indication of the arrival of reinforcements, except the two British battalions, shortly to be joined by an Australian, and to form a Commonwealth brigade. It is a long time since the last American reinforcement was reported. I confess I had hoped that an allied offensive would have become possible while there was still reasonable prospect of good weather and that the invaders would have been expelled by about February—that is, of course, if nothing untoward occurred elsewhere. In the meantime, the loss of ground has been disquieting, since ground is much more valuable now than before the front was established on the Nakdong. More troops may indeed have arrived without their advent having been announced, but the fact that the little British detachment was alerted on September 1 and cancelled training due to take place that day suggests that reserves were not plentiful. It will probably take some time for other Commonwealth troops, except the one Australian battalion, to arrive.

Despite powerful air support, wholly lacking to the attacker, the allies have remained uncertain in defence, presumably because they are still heavily outnumbered. This war has peculiar characteristics, hardly known in modern times. It is being fought in a primitive country, against a primitive people. Yet there has been seen in it none of the usual features of a "small" or "colonial" war. The North Koreans were at the outset in some respects better armed than the Americans, though their equipment is, as a whole, inferior. When arms were simpler and more easily constructed and maintained primitive nations sometimes faced highly civilised states on equal terms. In our Sikh wars, for example, we were opposed by artillery heavier than our own, and in those days one gun was much like another, so that the factor of superior accuracy was a minor one and guns of similar bore had a similar range, unless indeed there were differences in the quality of the powder. Now a period of warfare has been reached in which primitive nations cannot produce arms and equipment of the heavier and more complex types at all, and even highly civilised nations lacking in modern heavy industries can do so only to a limited extent.

Here the North Koreans were supplied by the Russians with good modern armament, though perhaps not on the scale first reported. A military mission taught them how to use these tools, and it is said that there were about three times as many Russian instructors in North Korea as there were American in South Korea. Whether the northerners learnt their tactics of infiltration from the Russians I do not know. There is evidence that such tactics were used by the latter against the Germans, but detailed information on the subject is lacking. What has been reported from Korea, in particular about the road blocks so often established behind the defence, is reminiscent of Japanese tactics. Much has been said about the service of Koreans with Russian and Chinese Communist forces, but it should be remembered that large numbers of them served with the Japanese in the Second World War, though I believe not in the fighting line, as a rule. The world discovered years ago that the Japanese had a gift for twentieth-century warfare. In the Second World War, Europeans generally required superior numbers or armament, or both, to defeat them. What they could learn, the Koreans can also learn. What would have been the result of this campaign if air superiority had been on the other side?

Air superiority will always be the prerogative of the great industrial nations; it can never be wrung from them except briefly and locally. Atomic bombs, world-ranging rockets, aircraft carriers, and many other things which are used or may be used in war, are not for the primitive or the poor. Yet surely this war in Korea drives home the warnings that the white nations have already received with respect to their dealings with Asiatic and African peoples. If a little country such as the Communist Republic of North Korea can be made so formidable in so short a time, and can learn to use modern weapons so effectively, it means much more than that whenever a primitive people can obtain arms and mixes guerrilla warfare with orthodox tactics it will be difficult to defeat, perhaps invincible, in its own country. That much we were beginning to suspect already. Now the possibility must be faced of a hostile power with armament to dispose of putting a primitive people in a position to seize the initiative, to act on the offensive, to invade the territory of a more highly developed community, with good chances of success.



ON THE NAKTONG RIVER FRONT: A BREN-GUNNER OF THE BRITISH FORCES WITH HIS PUPPY BOB, WHICH HE BROUGHT WITH HIM FROM HONG KONG.

There are very few colonial possessions now left in Asia, though Russia still rules millions of subjects alien to her in blood, in religion, and in ideals. When we pause to consider ideas such as those outlined above our thoughts turn rather to Africa. In general, African brains are not as quick as Asiatic, but Africans have been trained for war and have recently been taught the use of weapons and equipment which at one time no one would have believed them capable of handling. It would be rash to take it for granted that with patience, allied to the higher educational standards achieved by some Africans at least, their proficiency could not be advanced considerably further still. European communities in Africa are in every case small in numbers by comparison with the surrounding natives. At the moment no unfriendly power could arm and equip a native army on a serious scale, but it would be unwise to regard that fact as proof of permanent security. We have seen sweeping changes in our own time. A generation ago, no one could have prophesied that China would be a Communist state, or that an American army would be fighting a campaign in Korea.

In these circumstances, leaving moral issues out of account, such white communities should consider the material risk of creating in the minds of natives alongside whom they live a sense of unjust treatment. This may not be dangerous at the moment, though I am inclined to think it is, but it might breed serious danger in the not-distant future. I am not supporting the rather sensational writers who seek to prove that the day of the white man is drawing to its close. If it is, the twilight will be a long one, and this generation has problems enough of its own. I am merely dealing with a particular branch of this problem which might become acute within the lifetime of present-day school-children. Hitherto, the general view, which seems sound on the face of it, has been that the more expensive and complex armaments became, the greater would be the disadvantages of primitive peoples in war. This would be true, so long as such peoples depended on their own efforts to obtain the arms. If they are supplied with them it becomes another matter. It was also the general view that even if they had them they would not know how to use them. The Koreans have not taken long to learn.





BRITISH GROUND FORCES ENTER THE FIGHTING AREA IN KOREA: TROOPS OF THE BRITISH BRIGADE MOVING UP A KOREAN ROAD TO TAKE OVER POSITIONS FROM AMERICAN TROOPS DURING THE ALL-OUT NORTH KOREAN OFFENSIVE.



BRITISH GROUND FORCES REINFORCE U.S. TROOPS IN THE UNITED NATIONS RESISTANCE TO COMMUNIST AGGRESSION IN KOREA: BRITISH INFANTRYMEN (RIGHT) GREETED BY A U.S. BATTERY AS THEY MOVED UP TO TAKE OVER POSITIONS ON THE NAKTONG RIVER FRONT ON SEPTEMBER 4.

THE BRITISH TOMMY IN KOREA: TROOPS OF AN ENGLISH AND SCOTTISH BRIGADE REINFORCE THE U.S.



## EDINBURGH AND THE THISTLE FOUNDATION : THE QUEEN AND PRINCESS MARGARET IN SCOTLAND.



1. ARRIVING AT THE KING'S THEATRE TO HEAR THE GLYNDEBOURNE "ARIADNE AUF NAXOS"; THE QUEEN AND PRINCESS MARGARET.
3. AFTER OPENING THE THISTLE FOUNDATION SETTLEMENT AT CRAIGMILLAR ; THE QUEEN ADMIRING A SIX-MONTHS OLD BABY.

2. THE QUEEN AND PRINCESS MARGARET AT THE MILITARY TATTOO ON THE CASTLE ESPLANADE ON SEPTEMBER 5.
4. THE QUEEN AT THE DOVECOTE STUDIO, CORSTORPHINE, WITH PRINCESS MARGARET.

During their visit to Edinburgh from September 3—7, the Queen and Princess Margaret attended Festival performances and fulfilled numerous engagements. On Sept-

ember 5 Her Majesty opened the Thistle Foundation settlement at Craigmillar and laid the stone of the Chapel.





(TOP) ATTENDED BY 30,000 PEOPLE: THE BRAEMAR GATHERING; A GENERAL VIEW OF THE SCENE IN PRINCESS ROYAL PARK ON SEPTEMBER 7.

(BOTTOM) PAUSING TO LOOK AT A MASSIVE CABER: THEIR MAJESTIES THE KING AND QUEEN, AND PRINCE MICHAEL OF KENT (CENTRE RIGHT) AT BRAEMAR.

A ROYAL OCCASION: THEIR MAJESTIES THE KING AND QUEEN AT A MEMORABLE BRAEMAR GATHERING.





(TOP.) THE CLOSING CEREMONY OF THE FOURTH EDINBURGH FESTIVAL: A FIREWORKS DISPLAY IN PROGRESS FROM THE CASTLE ON SEPTEMBER 9.

BOTTOM.) ACCOMPANIED BY CANNON FIRED FROM THE BATTLEMENTS OF EDINBURGH CASTLE: HANDEL'S "MUSIC FOR THE ROYAL FIREWORKS" CONDUCTED BY SIR THOMAS BEECHAM.

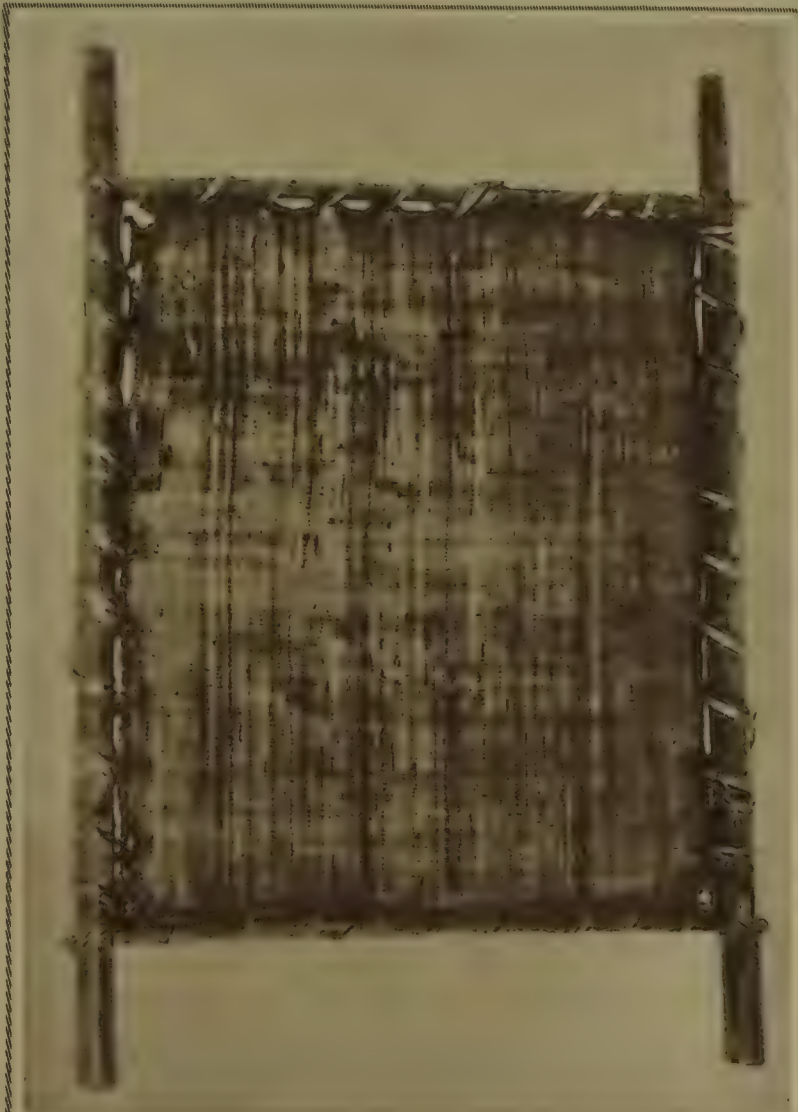
CLOSING WITH FIREWORKS AND THE ROAR OF CANNON: THE FOURTH EDINBURGH FESTIVAL.



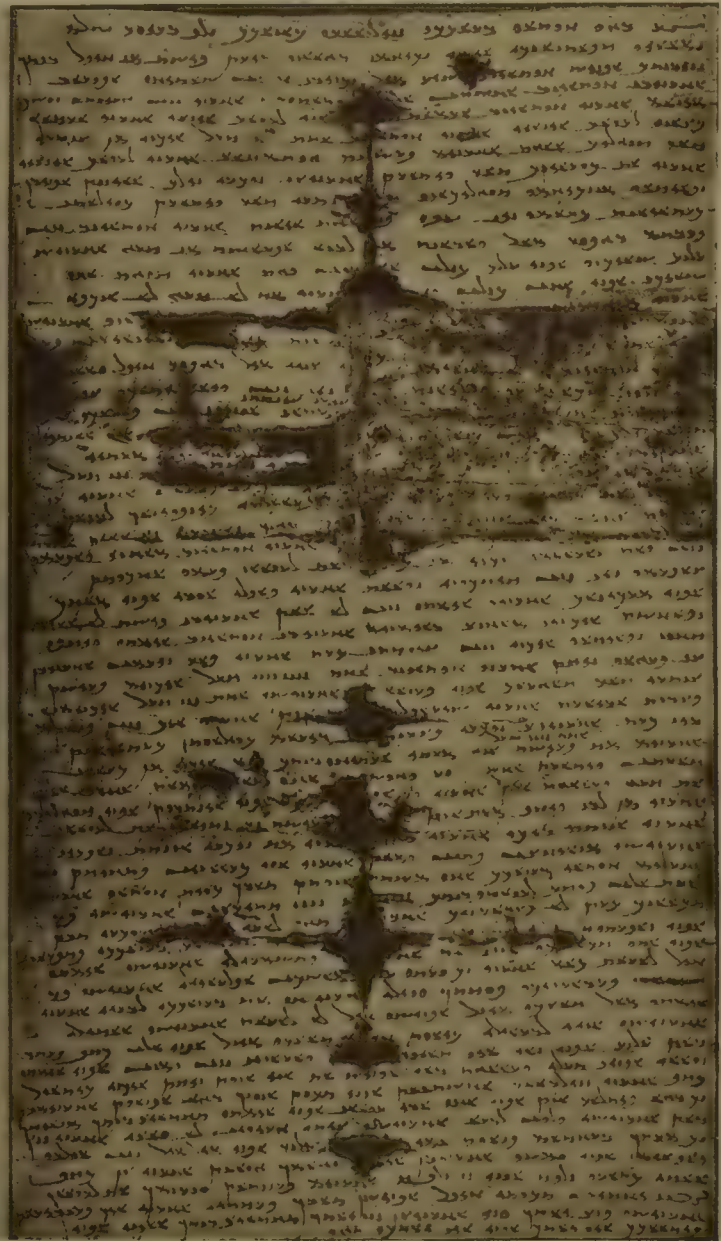
THE WORLD'S MOST IMPORTANT MATERIAL—  
PAPER—ITS ORIGINS AND HISTORY.



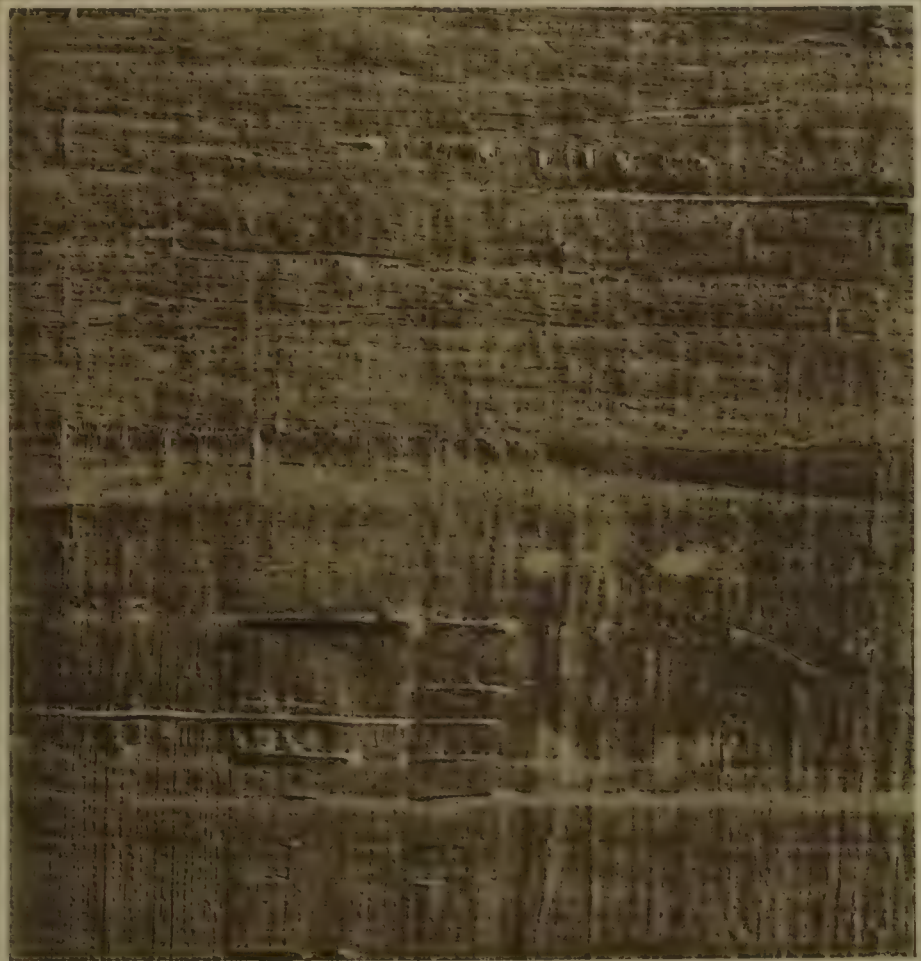
THE OLDEST KNOWN PAPER: FRAGMENTS DATING FROM THE EASTERN HAN PERIOD (A.D. 25-220). ALTHOUGH VERY ANCIENT THIS PAPER IS NOT CONTEMPORARY WITH TS'AI LUN, ACCREDITED INVENTOR OF PAPER IN C. A.D. 105. (British Museum.)



THE BASIC INVENTION IN PAPER-MAKING: A BAMBOO FRAME SUPPORTING A SQUARE OF CLOSELY-WOVEN CLOTH, PROBABLY SIMILAR TO THE MOULD USED BY TS'AI LUN TO LIFT BEATEN FIBRES FROM WATER.



MANUSCRIPTS FROM THE DAWN OF PAPER HISTORY: FRAGMENTS, DATING FROM C. A.D. 150, FOUND IN 1907 BY SIR AUREL STEIN IN THE RUINS OF THE GREAT WALL OF CHINA. (British Museum.)



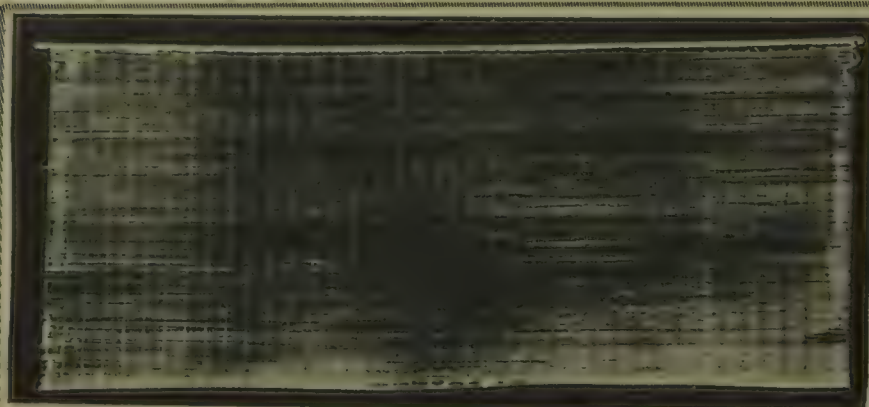
THE WRITING MATERIAL USED BY THE EGYPTIANS BEFORE THE INVENTION OF PAPER: PAPYRUS, WHICH HAS NO RELATION TO PAPER, BEING A LAMINATED MATERIAL BUILT UP BY PASTING TOGETHER THIN SLICES OF PLANT STALKS.

The importance of paper was brought home to everyone during the war, when shortage of it deprived us of reading matter and hampered us in a thousand ways. Paper is not only a luxury and a convenience; it is man's passport from savagery to civilisation, for without it the accumulated knowledge of the ages could not have been conveniently recorded. Its long and romantic history has been traced by Dr. Dard Hunter in his book, "Paper Making: the History and Technique of

an Ancient Craft," while the photographs which appear on this and the following pages were published in *Natural History*, the Magazine of the American Museum of Natural History, together with an article from his pen. Paper was invented in China by Ts'ai-Lun, probably c. A.D. 105. From China it found its way into Central Asia and Persia. From Samarkand it spread to Bagdad and Damascus, Egypt and Morocco, finally, after nearly 500 years, reaching Europe.



# MILESTONES IN THE STORY OF PAPER-MAKING: IN THE ORIENT AND OCCIDENT.



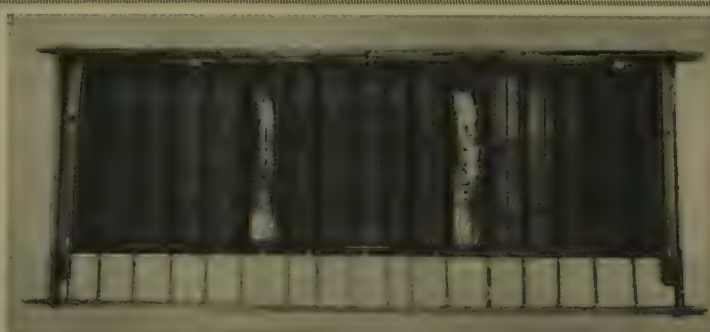
A "LAID" BAMBOO MOULD FROM TONKIN, INDO-CHINA, UPON WHICH PAPER IS FORMED: THE IMPRESSIONS OF THE BAMBOO STRIPS AND THE LACINGS OF HAIR MAY BE DETECTED IN THE EARLIEST KNOWN PAPER.



MADE ON THE SAME SYSTEM AS THE CHINESE MOULDS: A MODERN MOULD FOR MAKING EIGHT SHEETS OF PAPER AT ONE TIME. AS BAMBOO WAS NOT OBTAINABLE, THE EARLIEST EUROPEAN MOULDS WERE OF WIRE.



FORERUNNERS OF MODERN WATERMARKS: THE IMPRESSIONS LEFT BY THE BAMBOO STRIPS AND LACING, "LAID" AND "CHAIN" LINES SEEN IN THE EARLIEST PAPER.



DIVIDED WITH STRIPS OF LEATHER SO THAT THREE SHEETS CAN BE FORMED AT THE SAME TIME: AN EXAMPLE OF THE ORIGINAL "LAID" PAPER MOULD OF THIN STRIPS OF BAMBOO LACED TOGETHER WITH HAIR.

PAPER is defined by Noah Webster as "a substance made in the form of thin sheets or leaves from rags, straw, bark, wood or other fibrous material for various uses." "To be classed as true paper," writes Dr. Dard Hunter in his book, "Paper Making," "the thin sheets must be made from fibre that has been macerated until each individual filament is a separate unit; the fibres inter-mixed with water, and by the use of a sieve-like screen the fibres lifted from the water in the form of a thin stratum, the water draining through the small openings of the screen leaving a sheet of matted fibre upon the screen's surface." This was the original method, and to-day the most elaborate and efficient paper-making machine employs precisely the same principle. The Chinese scribes wrote with the stylus on strips of wood before the invention of paper, but the material was bulky and difficult to store. It was eventually superseded by woven material, especially after the invention of the hair writing-brush, and the Chinese made books and scrolls of silk. There was waste when these silk mss. were cut, and it was these discarded strips of silk that no doubt suggested to the adroit and practical Chinese mind the possibilities of making paper. In arriving at the idea of macerating the waste silk fibres and felting them into sheets of paper, it is likely that the early Chinese craftsmen were aided by their knowledge of felt-making. In his book on the history

[Continued below.]



A MILESTONE IN PAPER-MAKING: A MOULD FROM WHICH A SHEET OF PAPER CAN BE TAKEN WHILE MOIST, THUS ENABLING THE WORKER TO PRODUCE SHEETS WITHOUT PAUSE.



AN ANCIENT PROCESS STILL WIDELY FOLLOWED: REMOVING THE PAPER AFTER DRYING IN RATTAN MOULDS. THESE LEAVE A WICKERWORK IMPRESSION OF RATTAN ON THE PAPER.



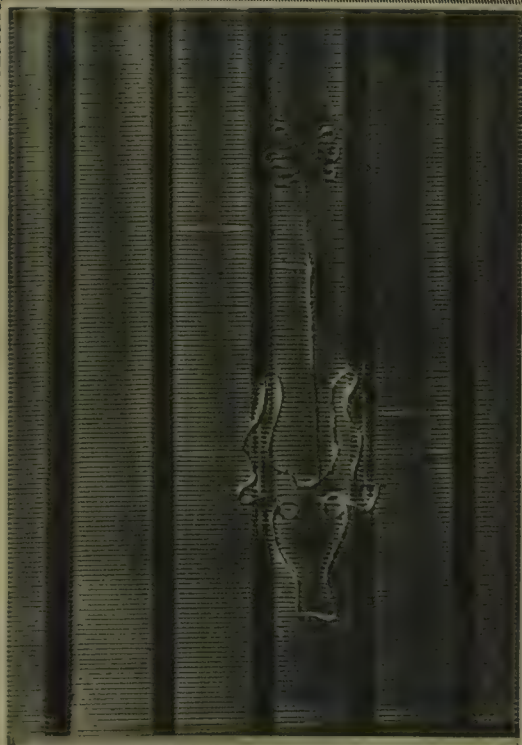
A METHOD OF PAPER-MAKING FOLLOWED IN KWANGTUNG; THE MOULD, WITH THE THIN DEPOSIT OF FELTED FIBRES ADHERING TO ITS SURFACE, IS PLACED TO DRY IN THE SUN, AS THE EARLIEST PAPER-MAKERS DID.

[Continued.] of Paper-Making, Dr. Dard Hunter points out that the rapid development of calligraphy by archaic Chinese scholars, and their spontaneous adoption of the camel-hair brush and fluid pigment, were factors in the subsequent invention of paper, for they emphasise the necessity for finding a writing substance cheaper and more practical than woven textile. It was this urgent need for a totally new writing surface that inspired the Chinese eunuch Ts'ai Lun, in A.D. 105, to proclaim his

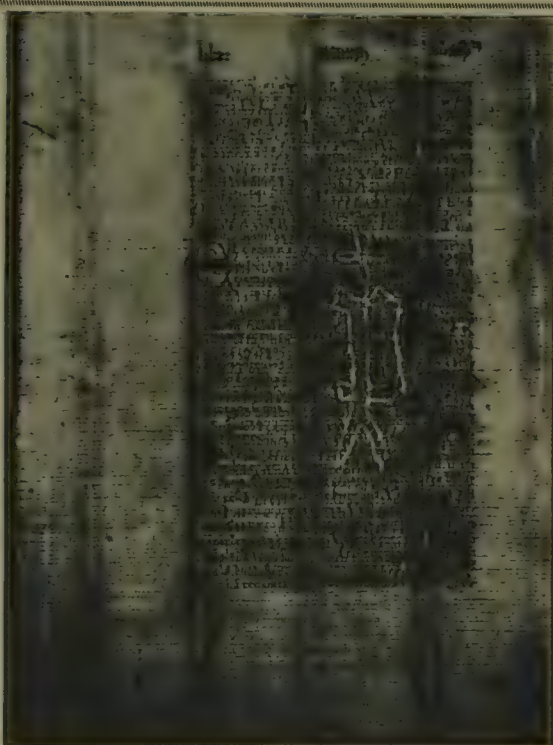
marvellous invention of true paper. With the advent of paper the art of calligraphy as originally conceived by T'sang Chieh, in B.C. 2700 had its real impetus, and the brush-written manner of recording history and setting down accounts was destined to supersede all other methods. It is strange that the invention of printing was so long delayed after the invention of paper. It was not till A.D. 770 that the first text printing upon paper was completed in Japan, though the conception was Chinese.



# PAPER-MAKING DEVICES: MODERN, MEDIAEVAL AND NATURE'S OWN.



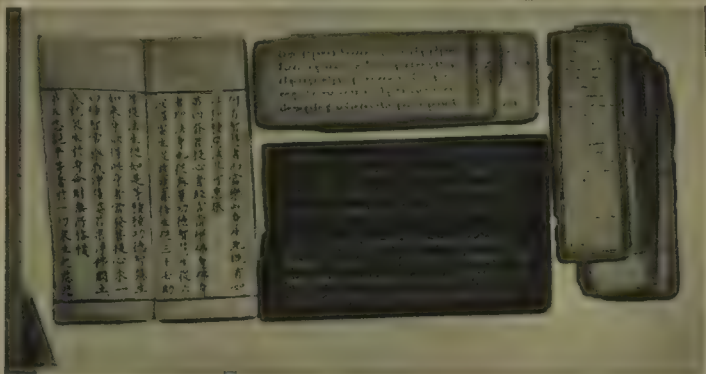
A FIFTEENTH-CENTURY MOULD, SHOWING THE WIRE WATERMARK SEWN TO THE SURFACE: IN EUROPE, WIRE REPLACED BAMBOO FOR PAPER-MAKING MOULDS. Courtesy of the "Encyclopædia Britannica."



SHOWING THE WATERMARK IN PAPER OF THE FIFTEENTH CENTURY: THE LETTER "P," THE INITIAL OF PHILIP THE GOOD, OR PHILIP THE HARDY, WAS VERY USUAL IN EUROPE AT THIS PERIOD.

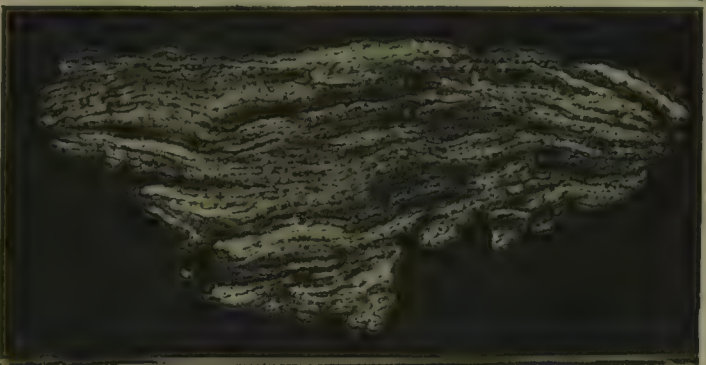
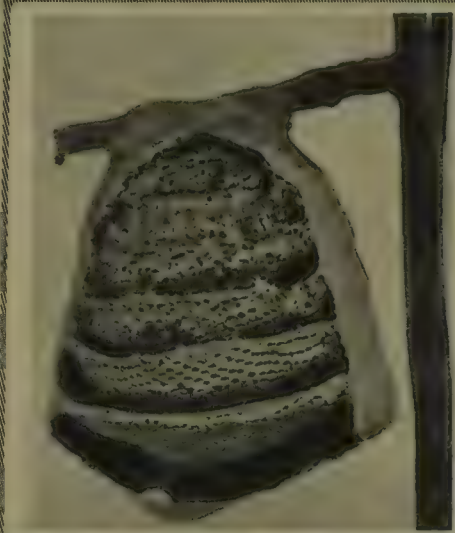


WITH LETTERING AND SYMBOLS AKIN TO THOSE OF THE 15TH CENTURY: A MODERN MOULD FOR MAKING PAPER, WITH A 19TH-CENTURY LIGHT-AND-SHADE WATERMARKING DEVICE. Courtesy of the "Encyclopædia Britannica."

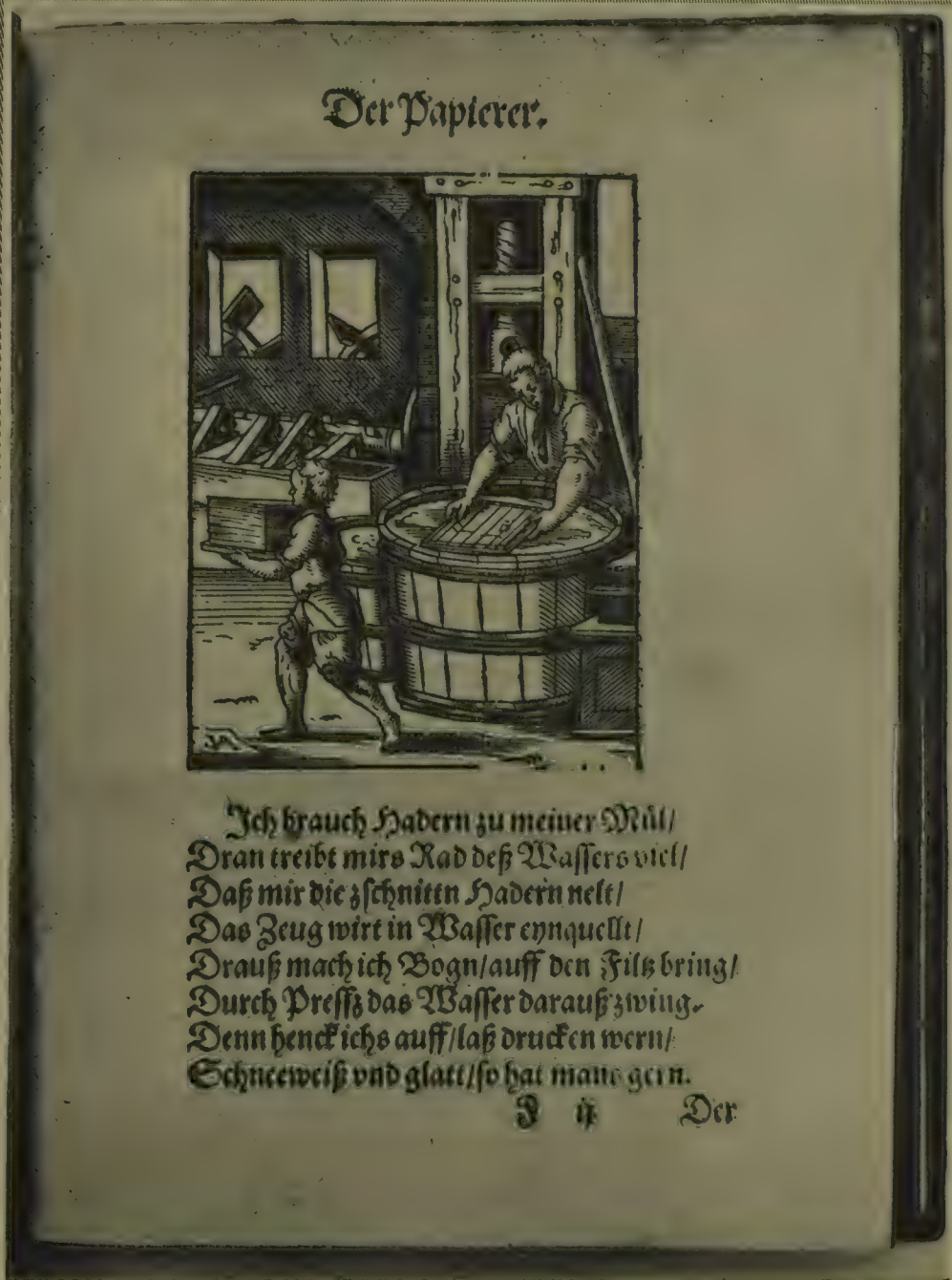


ON SOFT ABSORBENT PAPER FROM CHINA, TIBET, SIAM AND MONGOLIA, MADE SPECIALLY FOR WRITING IN ORIENTAL CALLIGRAPHY WITH A HAIR BRUSH: OLD MANUSCRIPTS OF EXCEPTIONAL INTEREST.

NATURE'S OWN PAPER-MAKING: A NEST OF THE MARABUNTER WASP (*CHARTERUS SP.*), WITH WALLS OF A MATERIAL OF THE CONSISTENCY OF FRAGILE CARDBOARD. (British Museum: Natural History.)



MATERIAL WHICH LED THE FRENCH EIGHTEENTH-CENTURY SCIENTIST RÉAUMUR TO THE DISCOVERY OF MAKING PAPER FROM WOOD: MATERIAL MANUFACTURED BY THE WASP IN THE CONSTRUCTION OF ITS NEST.



THE EARLIEST ILLUSTRATION DEPICTING PAPER-MAKING IN EAST OR WEST, ENGRAVED BY JOST AMMAN (1539-1591), PUBLISHED 1568: THE CRAFTSMAN IS LIFTING THE FILM OF FLOATING FIBRES FROM THE WATER IN A MOULD, WHILE HIS APPRENTICE CARRIES OFF A STACK OF PAPER FOR DRYING.

"While almost 2000 years have elapsed since the invention of forming sheets of paper, the principle of the *modus operandi* remains almost identical," wrote Dr. Dard Hunter, in an article he contributed to the Magazine of the American Museum of Natural History. It is not known whether the craft was first introduced into Spain or Italy, but the first paper-making in Europe was accomplished in the twelfth or thirteenth century. Moulds of wire were used, as bamboo, from which the Oriental moulds were constructed, was unobtainable, but the form remained the same. The

Oriental makers with their rigid moulds, never used watermarks in the form of designs, but the pliable wire European moulds lent themselves to watermark devices. Owing to the demand for paper, rags from which to make it became very scarce, and in the early eighteenth century René Antoine Ferchault Réaumur, a French scientist, studied the paper-like substance made from wood by wasps; but it was not until 1765 that practical experiments were undertaken in making paper from wood—the substance which to-day furnishes the material for the great bulk of the paper in use.



# PAPER-MANUFACTURE IN THE EAST: AND A UNIQUE KOREAN METHOD OF USE.



DR. DARD HUNTER, AUTHOR OF "PAPER MAKING, THE HISTORY AND TECHNIQUE OF AN ANCIENT CRAFT," AN AUTHORITY ON THE SUBJECT, AND A PAPER-MAKER HOLDING THE MOULD FOR THE MAKING OF THE TEMPLE PAPER OF SIAM.



MAKING PAPER IN INDIA: THE VATMAN SITS AT HIS WORK AND, WHILE MOULD AND VAT DIFFER FROM THOSE OF THE OCCIDENT, THE PRINCIPLE OF TECHNIQUE REMAINS THE SAME.



IN THE ORIENT, PAPER-MAKERS USE THE ANCIENT LEVER PRESS, ADDING STONES AS MORE PRESSURE IS DESIRED: SUCH PRIMITIVE PRESSES ARE IN USE EVEN IN THE LARGEST HAND-MADE-PAPER MILLS OF JAPAN.



DR. DARD HUNTER BETWEEN TWO KOREAN PAPER-MILL OWNERS: A PULP-GRINDING STONE WAS FORMERLY USED IN KOREA FOR THE MACERATION OF PAPER-MAKING MATERIAL.



FORMING SHEETS OF PAPER ALONG THE STREAM IN THE PAPER VILLAGE OF OMPEI, CENTRAL KOREA. PAPER-MAKING WAS INTRODUCED INTO JAPAN BY WAY OF KOREA IN THE SEVENTH CENTURY.

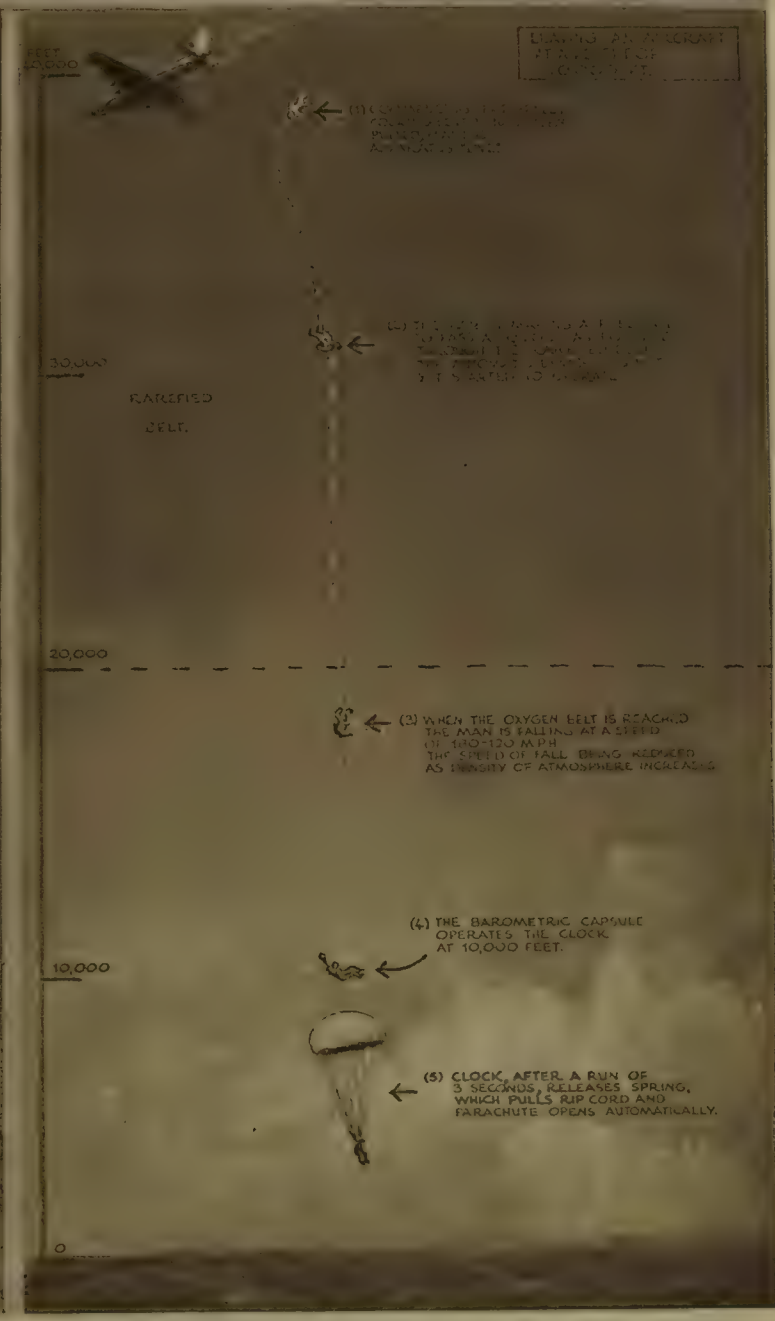
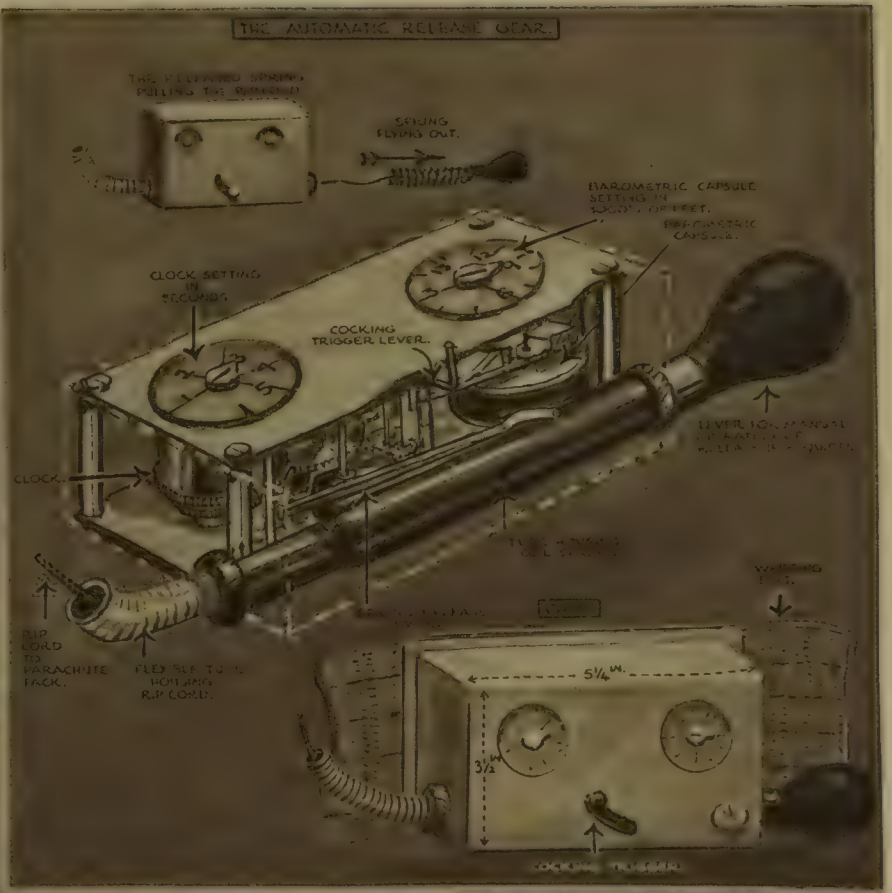


HEAVY PAPER-MAKING IN KOREA: IN KOREAN HOUSES PAPER PLAYS A UNIQUE PART, FOR, IN PLACE OF THE GRASS MATS USED ON THE FLOOR OF JAPANESE HOUSES, KOREANS EMPLOY THICK OILED PAPER.

No paper exists dating from the first few years of its inception, so the form of the original moulds can only be surmised. It is likely that the first mould, as invented and used by Ts'ai Lun, was merely a square of coarsely woven cloth held in a four-sided bamboo frame. After the moisture had evaporated, the sheet of paper, impressed with the warp and woof of the mould cloth, just as watermarks are impressed on paper to-day, could be stripped from the mould. This was the original "wove" mould, but as the paper could not be removed until

dry, a very large number of moulds were needed. The invention of the rigid transfer mould, from which paper could be taken while moist, was most important. These moulds were made of thin strips of rounded bamboo laid parallel and laced together with hair. The resulting indentations constitute the original "laid" watermarks. It may interest readers to know that the paper on which *The Illustrated London News* is printed is largely made from esparto grass. This was not available during the war, but the manufacturers did a good job with straw.





DESIGNED TO ENABLE AIRMEN TO PARACHUTE FROM GREAT ALTITUDES IN SAFETY: THE IRVIN AUTOMATIC RELEASE GEAR.

The new Irvin fully-automatic safety parachute opening device which has been demonstrated at Stansted Aerodrome, in Essex, is designed to eliminate the human uncertainty of when to pull the rip-cord after an airman jumps, or is ejected, from an aircraft in distress and also to solve the problem of how to bring down in safety men injured by accident or by enemy action who are unable to operate the manual type of parachute. Previously the parachute of an injured man was opened by means of a static line attached to the aircraft, but should this be flying at a great height, the parachute opened in a few seconds and the injured man made a slow descent through the rarefied atmosphere and ran the risk of suffocation before he reached the breathable atmosphere. In a free fall, however, the airman falls at a rate of 180-120 m.p.h., compared with the 1000 ft. per minute when the parachute

is open, and therefore takes only two or three minutes to pass through the rarefied air. The new automatic release consists of a small aluminium box containing clockwork mechanism, primarily for use when the airman leaves the aircraft below 10,000 ft., which opens the parachute approximately three seconds after he jumps. The box also contains a barometric capsule (or small altimeter) which comes into use when the jump is made from greater altitudes. In this case the airman makes a free fall through the belt of rarefied atmosphere in which modern fighters and bombers now operate and, when he reaches 10,000 ft. or so above ground, the barometric capsule operates the clock mechanism and three seconds later this releases a coil-spring which in turn pulls the rip-cord and opens the parachute. The release gear can also be operated manually if required.

DRAWN BY OUR SPECIAL ARTIST, G. H. DAVIS, WITH THE CO-OPERATION OF THE IRVING AIR CHUTE OF GREAT BRITAIN, LTD.



# BLOWING WHITE-HOT GLASS AND PULLING IT LIKE LAMBERT CANDY: SKILLED WORKERS INTENT ON OUR EXPORT DRIVE.



MAKING THERMOMETER TUBING—A PROCESS WHICH SUGGESTS PULLING CANDY: THE MOLTEN GLASS IS STRETCHED AND TURNED.



A LAMBERT ROPE OF WHITE-HOT GLASS AND EMBEL BEING PULLED AND TWISTED WITH PRACTISED SKILL BY GLASS-WORKERS MOVING AWAY FROM EACH OTHER.



A SKILLED GLASS-WORKER "MARVERING": THIS PROCESS IS THE FIRST STAGE OF PREPARING A "CATHETER" OF THE GLASS IN THE MAKING OF A FLAT FRUIT-DISH.



THE FLAT FRUIT-DISH ASSUMES ITS FORM UNDER THE HANDS OF THE GLASS-WORKER, WHO IS SHAPING IT WITH A "BOARD" BY THE TRADITIONAL PROCESS.



THE GLASS-BLOWER AT WORK: HE IS SHAPING THE BOWL OF A HAND-MADE WINE-GLASS.



ONE OF THE STAGES IN THE MAKING OF A FLAT FRUIT-DISH: THE PARTLY SHAPED OBJECT HAS BEEN TRANSFERRED TO A "PUNTY" IRON, AND THE TOP IS BEING SHEARED PRIOR TO OPENING IT OUT.



HOW THE FOOT OF A HAND-MADE WINE-GLASS IS FORMED: THE GLASS-WORKER IS SHOWN DROPPING A "BIT" OF MOLTEN GLASS ON TO THE STEM.



INSPECTION OF THE FINISHED GLASSES AGAINST THE VIEWING SCREEN: ANY GLASSES THAT ARE OUT OF ALIGNMENT OR HAVE FLAWS OR BUBBLES ARE REJECTED.



THE INITIAL OPERATION IN THE MAKING OF A FRUIT-DISH: BLOWING THE WHITE-HOT "BUBBLE" FROM WHICH IT WILL BE SHAPED.



THE FINAL OPERATION IN MAKING A HAND-MADE WINE-GLASS: THE 'BOWL' IS BEING OPENED OUT SKILFULLY, WHILE THE FOOT IS HELD FIRMLY BY MEANS OF A CLAMP.

The high quality of British goods and the consequent prestige which they enjoy are the steps which will lead us out of the Economic Slough of Despond, though, like Christian, we are heavily burdened. This heartening truth was insisted on in the Working Party report on the hand-blown domestic glass industry, published on Dec. 22, 1947, and referred to in our issue of December 27, in connection with

photographs of the processes used in the production of hand-blown lead-crystal glass. On these pages we give further illustrations of glass-making as carried on by an old-established British firm. Glass-making was originally introduced to this country by wandering Venetians. In 1575 Queen Elizabeth granted a patent or monopoly to Jacob Verzellini, and about 1675 George Ravenscroft, with the aid of an Italian,

evolved the famous English flint-glass. Five years later, the Whitefriars Factory of John Powell and Sons (now of Wealdstone) was founded in London, and many of the skilled glass-blowers of to-day are descendants of seventeenth-century craftsmen. The method of manufacture alters little with the centuries, nor does the language of the workshops lose its picturesque phraseology. The chief craftsman is still

"the gaffer." He is "head of the chaff" with a "servitor" to assist him. High-speed skill is the keynote of glass-making. From the moment the white-hot molten glass is taken from the furnace on the blowing "iron" until the article is complete, every second counts. Our photographs show glass-blowers working in exactly the same way as their forbears did, using similar "iron tools," some of which are 200 years old.





A BRITISH OUTPOST IN THE FAR EAST WHOSE BOUNDARIES ARE CONTIGUOUS TO COMMUNIST CHINA: A PANORAMIC MAP OF HONG KONG AND THE HINTERLAND, SHOWING THE CANTON RIVER ESTUARY.

Since last October the frontier of the Crown Colony of Hong Kong has been manned by the Hong Kong police supported by British troops, while on the other side of the border Chinese Communist troops have been consolidating their position in the territories which they took over with the capture of

(Continued opposite)

1. Kwangsi Province.
2. Kowloon.
3. Delta Rice Paddies.
4. Canton.
5. Canton River.
6. Rice Paddies.
7. East River.
8. Kwangtung Province.

9. Hunan Province.
10. Communist-held areas.
11. Kiangsi Province.
12. Shikling.
13. Canton-Kowloon Railroad.
14. Fukien Province.
15. Wuyung.
16. Canton River Estuary.

KEY TO PANORAMIC MAP.

17. British Boundary.
18. Lantau Island.
19. South China Sea.
20. Deep Bay.
21. West Lamma Channel.
22. The New Territories.
23. British Fortifications.
24. The Peak.

25. East Lamma Channel.
26. Lamma Island.
27. Victoria Harbour.
28. Hong Kong.
29. Kowloon.
30. Repulse Bay.
31. Kaiak Airfield.
32. Stanley Fort.

(Continued)

Canton. Hong Kong was ceded by China to Britain in 1841 and the peninsula of Kowloon in 1860 and in 1898 the New Territories were leased for 99 years from the Chinese Government. The total area of the Colony is 391 square miles, and it has a population (1948) of 1,750,000.





THE STARTING-POINT AND ARRIVAL PLACE FOR AIR TRAVELLERS FROM THE ENDS OF THE EARTH: LONDON AIRPORT, VIEWED FROM THE AIR, SHOWING THE GENERAL LAYOUT.

London Airport, formerly Heath Row, was opened in 1946 and in our issue of May 25 that year we gave a drawing by G. H. Davis showing the design for the eventual layout, in which the offices and administrative buildings will be in the centre connected with the Bath Road (bottom right-hand corner) by a tunnel. Temporary buildings are still in use, but they offer travellers every possible

amenity. Aircraft of twenty different lines use London Airport, including B.O.A.C. (who have now moved their maintenance base there from Croydon); Pan-American (whose *Stratocruisers* can be accommodated in a hangar there), and Air Italia, Air France, K.L.M., and so forth. The *Brabazon* recently landed there. Three runways have been completed.



THE "NEVER-STOP" NAVY: SHIPS OF THE UNITED STATES SIXTH FLEET REFUELLING AND REPLENISHING STORES WHILE STEAMING AT TWELVE KNOTS IN THE MEDITERRANEAN.

During the last war great advances were made in the technique of keeping a fleet at sea for long periods, particularly in the Pacific. Here we show three ships of the U.S. Navy refuelling and replenishing stores from a veritable floating naval base while steaming at 12 knots in the Mediterranean.

At the bottom of the photograph is the destroyer *Hanson* refuelling from the U.S.S. *Salamonie*, a Fleet Auxiliary, which has the cruiser *Newport News* on the port side, which in turn is passing stores to the destroyer *Power*, which lies beyond.

'AIR AND SEA—A MODERN TRAVELLERS' BOURNE; AND THE "NEVER-STOP" U.S. NAVY.





### HOW A NEW SHIP IS TESTED FOR SPEED: THE "MEASURED MILE" OFF THE ISLE OF ARRAN.

Before a new ship is put upon the stocks, a model of the vessel, made exactly to scale, is thoroughly tested in order to satisfy the builders that in their "contract" with the shipping line they can guarantee that the vessel will have all the qualities laid down in the owner's architects' specification. After the ship has been launched there yet remains that all-important day when the new ship—whether a slow and humble tramp steamer or a large liner, a destroyer or a battleship—must be put through her speed trials on the measured mile. These measured miles are in reality sea miles (6080 ft.) and there are several of these round our coast, the most famous being in the Firth of Clyde, off the Isle of Arran. Here the conditions are ideal—the "mile" is sheltered by surrounding land, the currents are known and regular, and there is deep water close inshore. On the shores of Arran two sea miles are marked off by white posts that show up well against the timbered hillside with the lofty mountains topped by Goat Fell behind.

The ship makes her run in both directions and in some cases four runs are made. Representatives of the builders and the ship's owners station themselves on the wing of the bridge with stop-watches calibrated and verified against the ship's chronometer. As the ship, having worked up to full speed, comes up to the outer posts, these officials start their stop-watches as soon as the two posts are in alignment. The ship steams on a straight course and when the end posts are reached and coincide, the watches are stopped. The ship turns and makes a second run in the reverse direction, when the procedure is repeated. The results are compared with reference tables which list speeds corresponding to times over the course to the nearest fifth of a second to give the final figure. Meanwhile, in the engine-rooms and elsewhere in the machine spaces, records have been compiled with equal care and these are collected to provide data for the compilation of power and speed curves for reference when the ship goes into service.

DRAWN BY OUR SPECIAL ARTIST, G. H. DAVIS, WITH THE ASSISTANCE OF THE ORIENT STEAM NAVIGATION CO., LTD.



# BEAUTY CULTURE AND FARMING IN FOURTH-CENTURY GERMANY: ROMAN SARCOPHAGUS FINDS NEAR BONN.



FIG. 1. FROM A FOURTH-CENTURY A.D. ROMAN SARCOPHAGUS FOUND DURING THE WAR NEAR DÜREN: A LEATHER CASE, WITH SILVER-GILT FILIGREE DECORATION, AND TWO SMALL KNIVES (FRONT, SIDE AND BACK VIEWS).



(ABOVE).  
FIG. 2. FROM THE SAME SARCOPHAGUS AS FIG. 1: AN AMBER DISTAFF, ABOUT 7½ INS. LONG, WITH A BOWL-SHAPED SUMMIT. THE INDIVIDUAL PIECES OF AMBER ARE MOUNTED ON A METAL ROD.

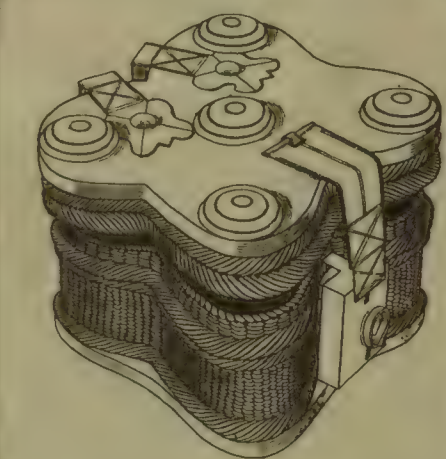


FIG. 3. DETAIL OF FIG. 5: THE INSET ENGRAVED PICTURE, SHOWING, ABOVE, THE PUNISHMENT OF MARSYAS; AND, BELOW, APOLLO SACRIFICING AT AN ALTAR. ABOUT 5½ INS. IN DIAMETER.



FIG. 4 (ABOVE) AND FIG. 6 (LEFT). A VANITY-BAG OF 1600 YEARS AGO: A HEXAGONAL BASKET (WITH RECONSTRUCTION BELOW) FOUND IN A WOMAN'S SARCOPHAGUS, AND CONTAINING THE SHATTERED REMAINS OF PERFUME AND COSMETIC BOTTLES.

(RIGHT.) FIG. 5. AN EXTREMELY BEAUTIFUL GLASS BOWL OF ABOUT A.D. 370, FROM A SARCOPHAGUS FOUND IN 1942 AT RODENKIRCHE. PROBABLY FROM THE ROMAN GLASS FACTORIES OF COLOGNE. ABOUT 9½ INS. IN DIAMETER. (DETAIL IN FIG. 3.)



IN May of this year, the Bonn Museum, which has usually been regarded as Germany's foremost museum with regard to Romano-German and Frankish art, was to be reopened. We reproduce on this page some photographs by the present

custodian, Herr W. Haberey, of some interesting objects acquired by the Museum during the war years. In 1943, excavations at Dorweiler bei Düren in the Rhineland revealed two Roman sarcophagi of the fourth century A.D. One had been pillaged in ancient times, but the other contained the skeleton of a young woman and a remarkable number of interesting objects, some of which are shown in Figs. 1, 2, 4 and 5. Among the toilet objects were two vanity-cases, one square, the other (Figs. 4 and 5) hexagonal, with lock and bronze key made to carry on a finger-ring. This contained fragments of cosmetic bottles with cork stoppers. The remaining objects (Figs. 3, 6, 7, 8 and 9) were found in a sarcophagus of about A.D. 370, found at Rodenkirche, containing coins of the Emperor Gratianus, the remarkable Marsyas bowl (Figs. 3 and 5), and a collection of miniatures which throw a vivid light on the farming and, indeed, the gardening practice of the time (Figs. 7, 8 and 9).



FIG. 8. ROMANO-GERMAN FARM IMPLEMENTS OF 1600 YEARS AGO: MINIATURES FOUND IN THE RODENKIRCHE SARCOPHAGUS, INCLUDING LADDER, HARROW, PLOUGH, WINNOWING-FAN, DOUBLE YOKE, RAKE AND FORK.



(LEFT.) FIG. 7. ALSO FOUND IN THE RODENKIRCHE SARCOPHAGUS: MINIATURE STATUETTES OF FROGS, A LIZARD, AND TWO YOKE-OXEN, ABOUT 1½ INS. LONG, WHICH FITTED INTO A NOW-SHATTERED CART.



FIG. 9. MORE FARMING AND GARDENING MINIATURES FROM THE RODENKIRCHE SARCOPHAGUS, WHICH INCLUDE HATCHETS, MATTOCKS, A HOE, A SICKLE, SHEEP-SHEARS, A LADLE AND A FORK—PRESENTING A VIVID PICTURE OF FOURTH-CENTURY GERMAN FARMING.



# OLD MASTERS IN AMERICA: IMPORTANT GIFTS TO THE NATIONAL GALLERY, WASHINGTON.



"MADONNA AND CHILD"; BY GIOVANNI BELLINI (c. 1430-1516). VENETIAN SCHOOL. [BOOTH COLLECTION.]



"HENRI II. DE LORRAINE, DUC DE GUISE"; BY SIR ANTHONY VAN DYCK. (1599-1641.) [PRESENTED IN 1947 BY MR. CORNELIUS VANDERBILT WHITNEY.]

This picture, which is in excellent condition, "offers a remarkable display of the brilliance of Van Dyck's mature technique," writes Mr. John Walker, Chief Curator of the Washington Gallery. The sitter, formerly believed to be William Villiers, Viscount Grandison, is now identified as Henri II. de Lorraine, Duc de Guise. (1614-1664.) He became Archbishop of Rheims at the age of fifteen, but abandoned the ecclesiastical career on inheriting the Dukedom. He was notorious for his gallantries and political adventures. At the end of the seventeenth century the portrait is believed to have belonged to François-Roger de Gaignières, a great French collector closely connected with the Guise family, who occupied their Paris residence, the Hôtel Guise.



"THE MAYOR OF MEMMINGEN"; BY BERNARD STRIGEL (c. 1460-61-1528). GERMAN SCHOOL. [BOOTH COLLECTION.]



"A PRINCE OF SAXONY"; BY LUCAS CRANACH, THE ELDER (1472-1553). GERMAN SCHOOL. [BOOTH COLLECTION.]



"A PRINCESS OF SAXONY"; BY LUCAS CRANACH, THE ELDER (1472-1553). GERMAN SCHOOL. [BOOTH COLLECTION.]



"PORTRAIT OF A NOBLEMAN"; BY NICOLAUS KREMER (D. 1553). GERMAN SCHOOL. [FROM THE RALPH AND MARY BOOTH COLLECTION.]



"PORTRAIT OF A YOUTH"; BY GIOVANNI ANTONIO BOLTRAFFIO (1467-1516). MILANESE SCHOOL. [FROM THE RALPH AND MARY BOOTH COLLECTION.]



"THE WIFE OF THE MAYOR OF MEMMINGEN"; BY BERNHARD STRIGEL (c. 1460-61-1528). GERMAN SCHOOL. [FROM THE RALPH AND MARY BOOTH COLLECTION.]

On this page we reproduce important acquisitions for the National Gallery of Art, Washington, D.C. The Van Dyck was presented by Mr. Cornelius Vanderbilt Whitney; and the other photographs show seven of the eight works by Italian and German artists of the fifteenth and sixteenth century from the collection formed by the late Ralph Harman Booth (President of the Arts Commission of the City of Detroit and for two years United

States Minister to Denmark) and his wife, which Mrs. Booth has presented. This was her second important gift to the Gallery. The Bellini "Madonna and Child" is famous. It is depicted in the Brussels "Interior of the Archduke Leopold Wilhelm's Gallery," by David Teniers, the Younger. The Boltraffio "Portrait of a Youth" was one of the pictures sent from America for exhibition at the Italian Art Exhibition in London in 1930.



## ANIMAL LIFE IN ANCIENT EGYPT: PETS, DOMESTIC ANIMALS

## AND GAME—SEEN THROUGH THE EYES OF EGYPTIAN ARTISTS.



(ABOVE) "THE CROCODILE THAT COMETH TO CARRY AWAY THE MAGIC WORDS": A PRIZE OF THREE, BEING A VIGNETTE FROM THE BOOK OF THE DEAD, ACCOMPANYING A SPELL. DETAIL FROM A PAPYRUS. (c. 330-330 B.C.)



BEFORE THE EMPLOYMENT OF THE CAMEL IN PERSIAN TIMES, THE DONKEY WAS THE ANCIENT EGYPTIAN MEANS OF DESERT TRANSPORT: LADEN DONKEYS, A RELIEF IN LIMESTONE. (c. 3500 B.C.)



AN ARTIST'S SKETCH OF DELIGHTFUL VIVACITY: A CALF, DRAWN IN RED INK ON A FRAGMENT OF LIMESTONE. FROM A TOMB AT THEBES. (c. 600 B.C.)



THE EGYPTIANS FREQUENTLY PITTED BULLS OR RAMS FOR SPORT, AS SHOWN IN THIS RED AND BLACK INK SKETCH ON A LIMESTONE FRAGMENT. (c. 1567-1090 B.C.)



A RAM'S HEAD IN LIMESTONE—USED AS A MODEL BY SCULPTORS WORKING ON TEMPLE WALLS IN THE SAITE-PTOLEMAIC PERIOD. (c. 665-30 B.C.)

(ABOVE) A TROTTING BULL IN A PAPYRUS SWAMP: A FACSIMILE FROM A PAINTED MUD PLASTER ORIGINAL IN A THEBES PALACE OF THE XVIII. DYNASTY (c. 1400 B.C.)



A CHARIOTREER'S WHIP-HANDLE OF EXTREME ELEGANCE, SHOWING A GALLOPING HORSE, CARVED FROM IVORY AND PAINTED. GENERALLY EGYPTIAN HORSES WERE DRIVEN, NOT RIDDEN. (c. 1375 B.C.)



A FAVOURITE YET WITH THE ANCIENT EGYPTIANS: A GAZELLE, STANDING AMONG FLOWERING PLANTS, IN PAINTED IVORY, ABOUT 4½ INS. HIGH. (c. 1375 B.C.)

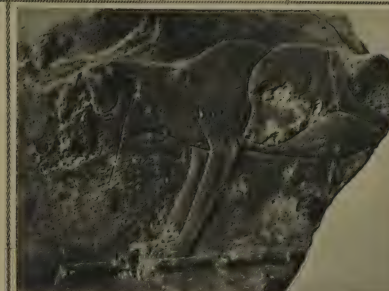


(LEFT) THE HIPPOFOTAMUS, IN EGYPTIAN ART (SEE ALSO RIGHT) SEEMS TO BE PORTRAYED WITH AFFECTION AND HUMOUR. A SKETCH PAINTED ON LIMESTONE. (c. 1500 B.C.)

(RIGHT) ANOTHER HIPPOFOTAMUS, THIS BEING FINELY MODELLED OUT OF ALABASTER, BUT SHOWING THE SAME FEELING AS THE CRUDE EXAMPLE (LEFT). (c. 1991-1778 B.C.)



ONE OF THE MOST ATTRACTIVE OF ANCIENT TOYS: A DETAIL FROM AN IVORY DOG, IN WHICH THE LEVER MOVES THE LOWER JAW. (c. 1375 B.C.)



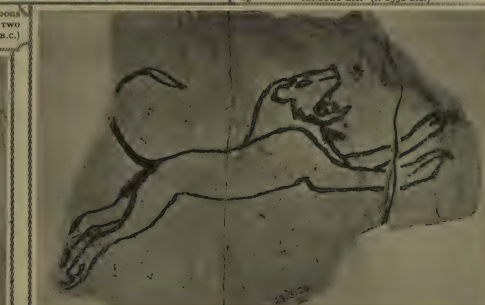
THE EGYPTIANS BOTH EMPLOYED DOGS AND KEPT THEM AS PETS. THESE TWO ARE ALIKE TO THE DOG (L.). (c. 2500 B.C.)



ONE OF THE EARLIEST EGYPTIAN REPRESENTATIONS OF A HORSE AND GROOM. THE HORSE WAS INTRODUCED INTO THE COUNTRY IN THE SEVENTEENTH CENTURY B.C. (c. 1550 B.C.)



FOUND, LIKE THE SKETCH OF THE CALF, IN THE TOMB AT THEBES OF NYUSU-PA-KA-SHUTY: A HORSE RUBBING ITS NOSE AGAINST ITS LEG. INK ON LIMESTONE. (c. 600 B.C.)



(ABOVE) BOTH BARBESSES II. AND III. KEPT LIONS AS PETS: THIS VIGOROUS INK SKETCH IS FROM THE SAME SOURCE AS THE CALF (c. 600 B.C.)



TO THE EGYPTIANS THE CROCODILE WAS A BEAST TO BE FEARED AND PROFITATED: THIS ENGRAVED SKETCH WAS SCRATCHED ON A LIMESTONE FRAGMENT. (c. 600 B.C.)



SACRED TO THOT, THE GOD OF WISDOM: THE DOG-FACED BARBOSON SHOWN IN A SCULPTURED SKETCH FROM THE VALLEY OF THE KINGS. (c. 1330-1090 B.C.)

The sacred nature of many animals in the life of Ancient Egypt and the strange beast-headed gods of the Egyptian pantheon have perhaps tended to create a belief that animals to the Egyptians appeared in a quite different light from that in which they appear to us. The illustrations on these pages, however, do much to correct this belief, and as Dorothy W. Phillips writes in a publication prepared

for the Metropolitan Museum of Art, New York: "In ancient Egypt animals played an active and very vital rôle in the everyday business of life. There was nothing mysterious about it. They were bred for food or for labour, they gave pleasure as pets and companions, they were the dangerous and elusive quarry of the huntsman—they were of paramount importance in the economy and life

Photographs Reproduced by Courtesy of

of the country. . . . The artists of Ancient Egypt seemed greatly attracted by the graceful form and lithe movement of animals. They were not bound by conventional traditions to the same extent in depicting scenes of animal life as they were in representing the more formal activities of men." The rough sketches which we include—hippopotamus, calf, horse and lion among them—in particular

The Metropolitan Museum of Art, New York.

reveal an especial raciness and vigour of style. Many animals were kept as pets, herds of cattle and even antelope were maintained and, after Hyksos times, Egypt became a great horse-breeding country—a fact referred to in the Bible—although in general the Egyptians seem to have driven and not ridden them, except as a matter of convenience during their care and training.



# A MODERN MONUMENTAL EFFIGY: KENNINGTON'S LAWRENCE OF ARABIA.



SHOWING THE REPRESENTATION OF THE ARAB DAGGER AND SHEATH, GIFT OF KING FAISAL: ERIC KENNINGTON'S FINE MONUMENTAL EFFIGY OF LAWRENCE OF ARABIA.



THE SANDALLED FEET OF THE EFFIGY: KENNINGTON'S RECURRENT FIGURE, CARVED FROM PORTLAND STONE, SHOWS LAWRENCE OF ARABIA WEARING ARAB DRESS.



SYMBOLISING LAWRENCE'S LOVE OF ARCHÆOLOGY: DETAIL OF THE FIGURE, BY ERIC KENNINGTON, SHOWING THE HITTITE CARVING AGAINST WHICH THE FEET ARE RESTING.



THE ANCIENT CHURCH WHICH CONTAINS ERIC KENNINGTON'S MEMORIAL EFFIGY: ST. MARTIN'S, WAREHAM, DORSET, WHICH LAWRENCE VISITED SEVERAL TIMES.



ERECTED OVER HIS GRAVE IN THE CEMETERY OF MORETON, WHERE HIS BODY RESTS: LAWRENCE'S TOMBSTONE, ALSO CARVED BY ERIC KENNINGTON.



DETAIL OF KENNINGTON'S EFFIGY OF HIS FRIEND LAWRENCE OF ARABIA: SHOWN WITH HIS HEAD DRAPED IN THE KAFFIYEH OF AN ARAB CHIEF.



THE HEAD OF THE EFFIGY, RESTING ON A CAMEL SADDLE; AND (L.) MALORY'S "MORTE D'ARTHUR," "THE GREEK ANTHOLOGY" AND "THE OXFORD BOOK OF VERSE."

English sculptors have, since the earliest times, produced monumental memorials and tomb effigies of exceptional beauty, power and pathos. On February 12 and March 19 last year we reproduced examples of fine ancient monuments from Gloucester Cathedral and Cirencester Church. On this page we give photographs of a modern effigy of a great Englishman, Lawrence of Arabia (1888-1935), famous for his heroic exploits as the organiser and inspirer of Arab guerilla warfare against the Turks during the 1914-18 war. Lawrence, who was an archæologist and a scholar, as well as a leader of men, was the author of that great book of the First World War, "The Seven Pillars of Wisdom." He was elected a Research Fellow of All Souls, Oxford, in 1919, and resided there for a year, but without entering much into College

life. He was recalled to the Colonial Office in 1921 to advise on Arab affairs, but he disagreed with the Allied policy towards the Arabs, and left the Government service in 1922, abjuring all official rank and decorations, and enlisting in the R.A.F. under the name of Shaw. In 1935 he was killed in a motor-bicycle accident. Eric Kennington, the painter and sculptor, cut his effigy of T. E. Lawrence from a block of Portland stone without the aid of any mechanical tools. Lawrence is represented in Arab dress, holding an Arab dagger in a sheath. His head rests on a camel saddle, and by him lie representations of the books which accompanied him on all his journeys, Malory's "Morte d'Arthur," "The Greek Anthology" and "The Oxford Book of Verse"; while a camel whip is depicted by his side.





**A CAT WITH A REMARKABLE ALPINE EXPLOIT TO HIS CREDIT : THE 10 MONTHS OLD BLACK-AND-WHITE KITTEN WHICH CLIMBED THE MATTERHORN.**

A kitten belonging to the Hotel Belvedere (10,820 ft.), on the Hörnli Ridge set out one morning to follow Alpinists starting to climb the Matterhorn. Soon out-distanced, he spent his first night in the Solway Hut (12,556 ft.), and the second in a *coulir* above the shoulder. Having negotiated the Ropes Slabs, and the Roof he joined the party for a meal at the summit (14,780 ft.). The guide who was leading them down the Italian side, took the cat in his rucksack to the

Rifugio Principe Amedeo di Savoia (12,763 ft.), as he realised that cats descend with more difficulty than they mount. We have no information as to why the cat undertook this dangerous climb, but it may well have been inspired by the desire to qualify for the Dickin Medal, universally recognised as the Animals V.C., which as recorded on another page, bears the name of the founder of the People's Dispensary for Sick Animals.





## THE WORLD OF SCIENCE.



### THE PHENOMENON OF SPORADIC HIBERNATION IN NESTLING SWIFTS.

By Collingwood Ingram.

BASED ON A LECTURE DELIVERED BY DR. M. D. UDVARDY AT UPSALA ON JUNE 15, 1950.

FROM its winter quarters in South Africa every spring the swift travels north to nest in Europe, and during the summer months it may be found in that continent from the shores of the Mediterranean to Lapland, Finland, and even Siberia. In the northernmost portions of that immense area very remarkable phenomena in connection with its breeding habits have recently come to light. For some time past ornithologists in Finland have noticed that before the advent of a cyclonic storm all the adult swifts disappear. The reason for this exodus is pretty obvious, for during such weather heavy rain beats down all insect life and the birds' food in consequence becomes

of interesting experiments he has discovered that whilst the body of an adult swift maintains a more or less constant temperature of about 104 degs. F., that of the young bird (which is normally several degrees lower) responds to, and is in fact, largely controlled by external conditions. Consequently, in the absence of a brooding parent, the temperature of the nestling will automatically fall to approximately that of the surrounding atmosphere. Should this be reduced to, let us say, 42 degs. F. or 43 degs. F., as would probably be the case in the cyclonic weather referred to, the chilled nestling quickly sinks into a semi-comatose condition and will start breathing at a very slow rate: in other words, its physiological

ately less weight and its retained activity, dies under similar conditions in only four or five days. Although the weight of a nestling swift necessarily depends upon its age, when nearly full-grown it will be appreciably heavier than its parents. But, apart from this initial advantage, Koskimies has shown that the young bird does not succumb from starvation until it has consumed 50 per cent. of its own weight, whereas the adult will die after losing only a third of it.

From what has been said it is clear that if swifts did not retreat before an oncoming storm it would be impossible for them to breed as far north as they do. As the fledgeling period lasts approximately six weeks (which is exceptionally long for a bird of its size), it would indeed be surprising if in those high latitudes there was not at least one such spell of bad weather during that time. With the return of normally warm conditions, the young regain their vitality, and the adults, having meanwhile reappeared, resume once more their parental duties.



"IN THE ADULT SWIFT ALL FOUR TOES ARE DIRECTED FORWARDS": THE FOOT OF A SWIFT (LEFT) COMPARED WITH THAT OF A PASSERINE SPECIES. [From a drawing by Collingwood Ingram.]



"THE NEST ITSELF IS A SHALLOW, SLIGHTLY HOLLOWED PLATFORM OF CEMENTED SALIVA IN WHICH A CLUTCH OF ONLY TWO OR THREE UNSPOTTED WHITE EGGS IS NORMALLY LAID": A SWIFT WITH HER YOUNG. [Photograph by C. Eric Palmer.]

CLIMBING BY USING ITS BILL, FELT AND (TO A MINOR DEGREE) ITS WINGS: A THREE-DAY-OLD SWIFT—THE ARRANGEMENT OF THE TOES SHOULD BE COMPARED WITH THOSE OF AN ADULT (SEE DRAWING ABOVE). From a drawing by Collingwood Ingram.

temporarily unobtainable. The retreating swifts are always observed flying to some unknown destination in a southerly or south-westerly direction. As, however, vast flocks of swifts occasionally appear in localities where they do not breed, sometimes hundreds of miles to the south of Finland, it may be presumed that these are the same birds. Because their irregular appearances generally precede tempestuous weather, the inhabitants of those localities call the birds "storm-" or "rain-swallows."

These pseudo-migrations, or mid-summer movements, are invariably connected with the approach of a meteorological disturbance. It has been proved that even while a threatening cyclone is still as far as 800 miles away, the swifts will commence their withdrawal, always flying against the wind in a more or less southerly direction. In territories lying behind—that is to say, to the north of the core of the cyclone—the birds will either remain where they are or will only move a short distance northwards, in which case they will also have to fly against the wind, which means that they will be taking an exactly opposite route to those departing from the south side of the cyclone.

As these temporary movements frequently occupy several days, and usually occur in the middle of the breeding season, we may well wonder what happens to the nestlings that are left behind? Do these abandoned fledgelings starve to death or do they perish from cold? We know that if such a catastrophe occurred to a passerine species the helpless young would die in the matter of hours. How, then, do the nestling swifts, deserted perhaps for five or six days, or even longer, manage to survive without either food or warmth?

This question has recently been answered by a Finnish scientist named J. Koskimies. By a series

condition becomes practically identical with that of a hibernating creature during its winter sleep—for example, bats, lizards and hedgehogs. Naturally, when in this state an absolute minimum of bodily fuel is consumed, and this fact, added to a previous accretion of weight, renders the nestling swift capable of surviving without food or parental warmth for periods up to nine or ten days. On the other hand, an adult swift, with its higher temperature, proportion-



AWAY FROM "WHAT MIGHT BE REASONABLY REGARDED AS THEIR NATURAL ELEMENT": A SWIFT ENGAGED IN NIDIFICATION. Reproduced from "Birds in Nature" by R. Bowdler Sharpe, F.L.S.

Although in England swifts usually nest under the eaves of houses, in church towers or in other buildings, where these are either few or non-existent, the birds have to seek other accommodation. Thus in the sparsely-populated north the species is often obliged to occupy disused woodpecker's holes or some other cavity in an old tree-trunk. The nest itself is a shallow, slightly hollowed platform of cemented saliva, in which a clutch of only two or three unspotted white eggs is normally laid.

In the adult swift all four toes are directed forwards, but during its embryonic stages and in early infancy this unusual arrangement is not so strongly pronounced and its feet will then resemble more closely those of a zygodactylous species—of which a parrot is a typical example, having two of its toes directed inwards and two outwards. The author has found that if a very young swift is removed from its nest it displays a marked tendency to climb upwards, and in doing so will employ its feet in a parrot-like fashion. But what struck him as still more remarkable was that the bird also brought its bill into use. By hooking this over any convenient object that happens to be available it will endeavour to hoist itself up by means of this member. A close examination shows that the lower mandible of an infant swift is slightly decurved, which suggests that it may be a vestigial character that was originally designed for this special purpose.

Whether swifts that are not actually engaged in nidification spend the whole of their time in the air is a point that has never been satisfactorily proved. The writer is of the opinion that they very frequently do, for he has, in common with most observers, often watched them long after sunset circling at great heights in the sky overhead, whilst on one occasion at Monte Carlo he distinctly heard the screaming cry of swifts in the darkness above the brightly-lit Casino grounds. On the other hand, in late June he has found both birds roosting at the nest, which seems to indicate that, at this season, at any rate, they do rest at night. But on migration, and perhaps also while in their winter quarters, it is extremely doubtful if they ever leave what might reasonably be regarded as their natural element.



THE R.P.S. ANNUAL INTERNATIONAL EXHIBITION—1950



A Barn Owl Family

Walter E. Higham, F.R.P.S., F.I.B.P.



Barn Owl Leaving Nest Hole

Walter E. Higham, F.R.P.S., F.I.B.P.

The Royal Photographic Society of Great Britain arranged to hold its 95th Annual Exhibition from Friday, September 15 until Sunday, October 15 at the Society's House, 16, Princes Gate, London, S.W.7, where the photographs reproduced above are on view.





FOR HIGH ALTITUDE RESEARCH: THE AVRO "ASHTON" WITH FOUR ROLLS-ROYCE "NENE" JETS.



THE ENGLISH ELECTRIC "CANBERRA" BOMBER WITH TWO ROLLS-ROYCE "NENE" JETS.



THE ANTI-SUBMARINE SHORT S.B.3, WITH TWO ARMSTRONG-SIDDELEY "MAMBA" TURBOPROPS.



A "METEOR" FIGHTER, WITH TWO ARMSTRONG-SIDDELEY "SAPPHIRE" JETS.



AN AVRO "LINCOLN" BOMBER WITH TWO OUTBOARD BRISTOL "PROTEUS" TURBOPROPS.



A "LINCOLN" BOMBER REFUELLING A "METEOR" FIGHTER IN THE AIR.



THE VICKERS-ARMSTRONG "SUPERMARINE" 535 FIGHTER, WITH ONE ROLLS-ROYCE "NENE" JET WITH REHEAT.



THE HUGE BLACKBURN "UNIVERSAL" FREIGHTER, WITH FOUR BRISTOL "HECOILES" ENGINES.



THE EXPERIMENTAL DELTA-WING AVRO 707 WITH ONE ROLLS-ROYCE "DERWENT" JET.



THE ANTI-SUBMARINE BLACKBURN Y.B.1 WITH ARMSTRONG-SIDDELEY "DOUBLE MAMBA" TURBOPROPS.



A "METEOR" FIGHTER WITH TWO ROLLS-ROYCE "NENE" JETS.



AN EXPERIMENTAL VICKERS-ARMSTRONG "VISCOUNT" AIRLINER WITH TWO ROLLS-ROYCE "TAY" JETS.





TRAINING CHILDREN TO TAKE AN INTEREST IN ANIMALS: MRS. DICKIN DISPLAYS A "BUSY BEES" PENNANT. THE "BUSY BEES" IS THE CHILDREN'S BRANCH OF THE P.D.S.A.

## CELEBRATING HER EIGHTIETH BIRTHDAY: MRS. DICKIN, FOUNDER OF THE P.D.S.A.



TO CELEBRATE HER EIGHTIETH BIRTHDAY ON SEPTEMBER 22ND: MRS. MARIA ELIZABETH DICKIN, FOUNDER AND CHAIRMAN OF THE PEOPLE'S DISPENSARY FOR SICK ANIMALS.



STILL TAKING AN ACTIVE INTEREST IN ANIMALS AFTER THIRTY-TWO YEARS OF DEVOTED WORK ON THEIR BEHALF: MRS. DICKIN, FOUNDER OF THE P.D.S.A.

On September 22nd, Mrs. Maria Elizabeth Dickin, founder of the People's Dispensary for Sick Animals, will celebrate her eightieth birthday. This remarkable woman spent her early life trying to relieve the suffering of poor people, especially children, living in the back streets and slums. She was horrified by the suffering of the animals belonging to those who had neither money nor knowledge to assist them in caring for their pets. On November 17th, 1917, the doors of the P.D.S.A.



LOOKING THROUGH THE 32ND REPORT OF THE P.D.S.A. WHICH RECORDS THE WONDERFUL WORK OF THIS WORLD FAMOUS ORGANISATION: MRS. M. E. DICKIN.

opened for the first time, the first Dispensary being in a Whitechapel cellar. The People's Dispensary for Sick Animals has now been incorporated by Special Act of Parliament as a charitable organisation for the free treatment of sick and injured animals of the poor, and it is supported entirely by voluntary contributions. Mrs. Dickin, who was awarded the C.B.E. in 1948 for her work for animals, gave her name to the Dickin Medal which is recognised as the "Animals' V.C."



## 'Gammexane'

'Gammexane' is a proprietary name given to a range of remarkable new insecticides developed as a result of wartime discoveries by I.C.I. research chemists. They are based on benzene hexachloride (BHC), a compound first prepared by Michael Faraday as far back as 1825, which can exist in four forms—known as the alpha, beta, gamma and delta "isomers"—each having the same molecular formula but different properties. The achievement of the I.C.I. chemists was their discovery that one of these isomers possessed remarkable insecticidal properties. By isolating and testing the different isomers, they established in 1943

that BHC's insecticidal powers lay almost entirely in its gamma isomer, and that in pure gamma BHC they had an insecticide which was, in some respects, the most effective ever discovered. 'Gammexane' insecticides, based on Gamma BHC, mark a significant advance because, though their effect on insects is both deadly and persistent, they are almost entirely harmless to men and animals. At home, in farms and factories, they have eradicated pests ranging from cattle ticks and wireworms to cockroaches, bed-bugs and the house fly. Overseas they have proved the most powerful of all weapons against the locust.





**Concentration.** In the main, fine judgment and close attention



The same judgment and attention are features of  
**"LONDON & LANCASHIRE" SERVICE**  
 7 CHANCERY LANE, LONDON, W.C.2

## A Glass of Sherry?



## Buy Royal Decree

This rich Royal Sherry—a wine of infinite character—comes from the famous Spanish House of Duff Gordon, established in 1772, to whom was granted the use of the Arms of Queen Isabella II—by Royal Decree  
 At Twenty shillings a bottle from your Wine Merchant.



Jarvis, Halliday & Co. Ltd., 62 Pall Mall, London,



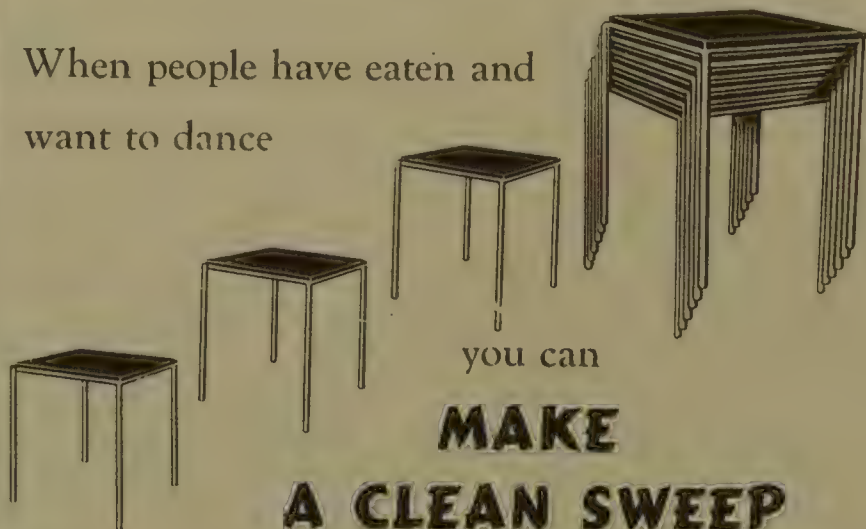
Simplicity is the keynote of good taste and the quiet dignity and charm of Walpamur Quality Paints give the perfect setting for rooms of distinction.



The Walpamur Co Ltd · Darwen and London.

W104

When people have eaten and want to dance



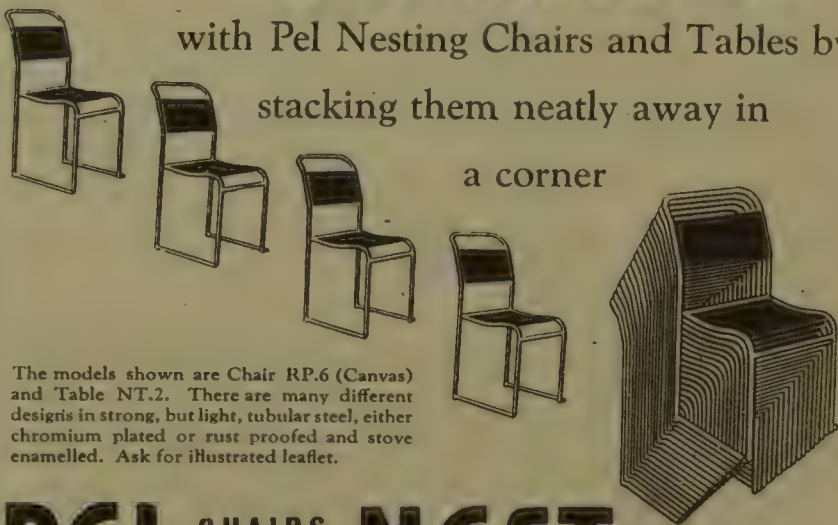
you can

**MAKE**

**A CLEAN SWEEP**


with Pel Nesting Chairs and Tables by stacking them neatly away in

a corner



The models shown are Chair RP.6 (Canvas) and Table NT.2. There are many different designs in strong, but light, tubular steel, either chromium plated or rust proofed and stove enamelled. Ask for illustrated leaflet.

**PEL CHAIRS TABLES NEST**

MADE BY  PEL LTD · OLDBURY · BIRMINGHAM

A  COMPANY

London Showrooms: 15 Henrietta Place, London, W.1. Distributors throughout the Country  
 TDW/NT51



We've been to AQUASCUTUM  
and what have we found?  
A couple of coveted covert  
coats. Finding's keepings!

*We both chose this for him... and we*

*Aquascutum Squire covert coat - worn with an EDWARDIAN air*

*both chose this for me*

*Aquascutum classic covert coat 'Calais' for town and country*

Price 22 gns.

Price 21 gns.

Husbands and wives  
who shop together at  
**Aquascutum**  
the shop in Regent  
Street get the best  
for both. It's  
amusing choosing too

Good shops everywhere are agents for Aquascutum

## FAMOUS QUEENS by famous Masters



MARIE ANTOINETTE  
by  
Vigée le Brun  
(Versailles Museum)



# HIGHLAND QUEEN

SCOTCH WHISKY BY  
MACDONALD & MUIR LTD  
Distillers Leith Scotland

## Bonsoir Pyjamas for BON VOYAGE

LONDON TAILORED PYJAMAS

FOR HER AND FOR YOU

by *Bonsoir*

SILVRO MANUFACTURING CO. LTD. LONDON N.16





Whenever discerning people meet  
the call is for

# CINZANO

GENUINE ITALIAN VERMOUTH

Internationally famous since 1816

Red or white, sweet. Also dry French

★ The Connoisseur's Aperitif — a generous measure of CINZANO, a little lemon peel, a chip of ice and a splash of soda. Try it today!

Product of S.A. Francesco, Cinzano & Cia, Turin, S. A. Cinzano, Paris



## Look at it this way



Binoculars are an expensive item at the best of times, consequently they should be selected with the greatest care. Naturally there are different types for different activities and you will know best which suits you, just as you know they must be made by Ross — the household name for binoculars everywhere.

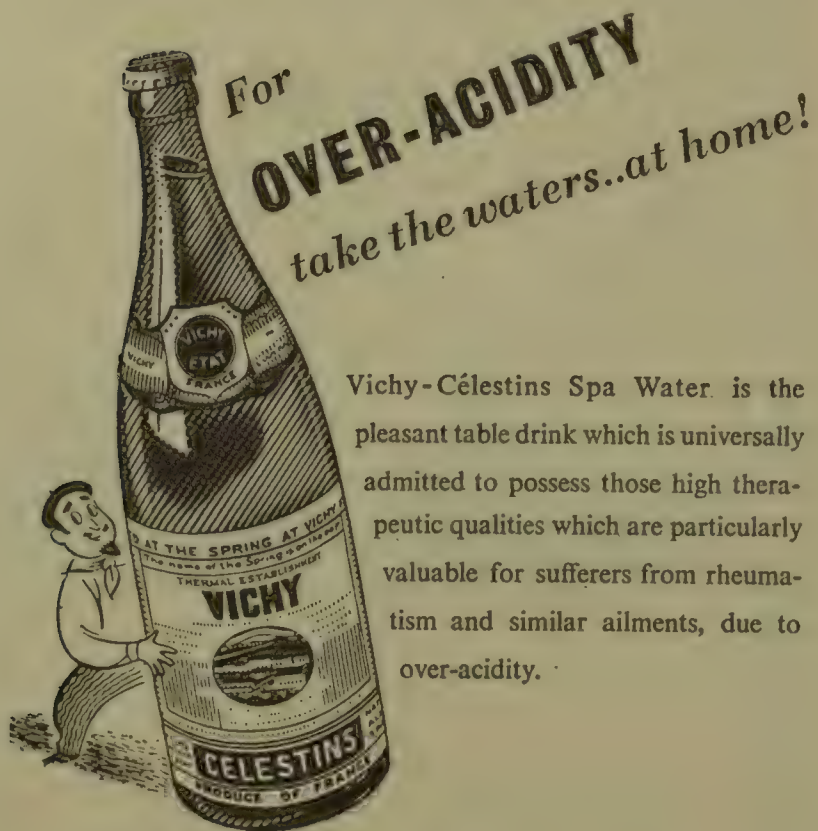
STEPMUR 10x50 £45. 0. 0.



ROSS  
LONDON

*Far and away  
the best!*

BARNET ENSIGN ROSS LIMITED, LONDON, E.17.



For  
**OVER-ACIDITY**  
take the waters...at home!

Vichy-Célestins Spa Water is the pleasant table drink which is universally admitted to possess those high therapeutic qualities which are particularly valuable for sufferers from rheumatism and similar ailments, due to over-acidity.

**VICHY-CELESTINS**  
WORLD-FAMOUS FRENCH SPA WATER

*Bottled as it flows from the Spring*

See that the label bears the name of the Sole Agents:

INGRAM & ROYLE LTD., 12 THAYER STREET, LONDON, W.1

# Say DULUX to your decorator

... because it's made for those who reckon the cost of property painting *per annum*. Owners of either large or small property should write for a copy of *The Economics of Maintenance Painting* to I.C.I. Paints Division, Slough, mentioning this journal.



D.D.818c

## Carters

INVALID FURNITURE

COMMON CHAIRS  
Catalogue 5L

FOLDING CHAIRS  
Catalogue 6L

SELF-PROPELLING CHAIRS  
Catalogue 4L

ELECTRIC CARRIAGE  
Catalogue 11L

HAND TRICYCLE  
Catalogue 9L

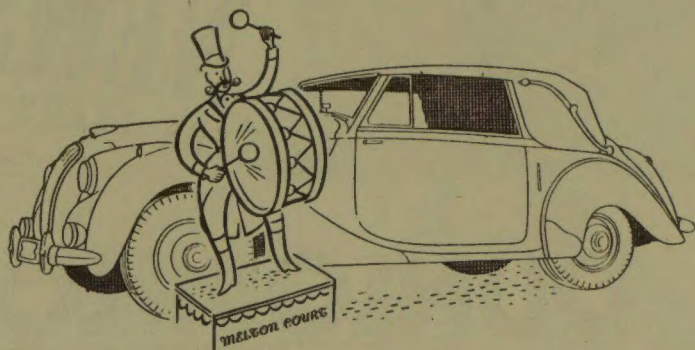
WHEEL CARRYING CHAIRS  
Catalogue 4L

**GREAT PORTLAND ST., LONDON, W.1**  
Phone: Langham 1049



Just for fun, Harold Radford invites you to spot

POPULAR MISQUOTATION No. 6.



## An empty vessel makes the most noise\*

Although we are known as Rolls-Royce and Bentley specialists, we are also sole concessionaires in Gt. Britain, N. Ireland and the British Empire for Hotchkiss and sole distributors in London and the Home Counties for H.R.G. We are officially appointed retailers for Humber, Hillman, Sunbeam-Talbot, Lagonda and Jowett, and we handle Austin, Ford, Jaguar, Rover and Standard as well. We have a really first-class repair and maintenance section and an efficient day and night private car hire service, not to mention a subsidiary Coachbuilding company and an associate Shipping Agency! Ours is by no means an "empty vessel"—and we hope we haven't made too much noise! Let us end, as we began, by reminding you of the Personal Touch and inviting you to call and see us at any time.

*Harold Radford*

\*The empty vessel makes the greatest sound (Henry V)

**HAROLD RADFORD & CO. LTD.**

MELTON COURT, LONDON, S.W.7

Opposite South Kensington Station. Tel.: Kensington 6642 (5 lines)

PRIVATE CAR HIRE SERVICE. TEL: KENSINGTON 5705



## The test of time

Only when a brand has gained the verdict of generations of smokers can it truly describe itself as *good* tobacco. John Cotton has been with us as one of the good things of life for 179 years . . . long may it remain as a companion for our pleasures, a solace in our worries.

John Cotton Tobacco Nos. 1 & 2 - 4/9 an oz.

No. 4 - - 4/5 „

Empire - - 4/1½ „

No. 1 Cigarettes - - - - 3/10 for 20

**JOHN COTTON**

A trusted Tobacco — a perfect Cigarette

MADE IN EDINBURGH SINCE 1770



BY APPOINTMENT  
CIGAR MERCHANTS  
TO H.M. THE KING

## Can you still say this?

“My husband  
always  
hurries home  
from work”



CAN YOU HONESTLY say that life is still the gay adventure it used to be? If you can't—if you quite often feel that your life is simply a humdrum existence—that's frequently a sign that your nerves are deprived of vital phosphorus and protein. 'Sanatogen'

contains these two great nerve and body-building agents. You will get from 'Sanatogen' a new energy and enthusiasm, bringing zest and enjoyment to a full family life. It helps to build up reserves of vitality of which too many people are deprived these days.

**SANATOGEN** THE NERVE TONIC

'Sanatogen' (Regd. Trade Mark) is obtainable at all chemists from 5/6, inc. tax.

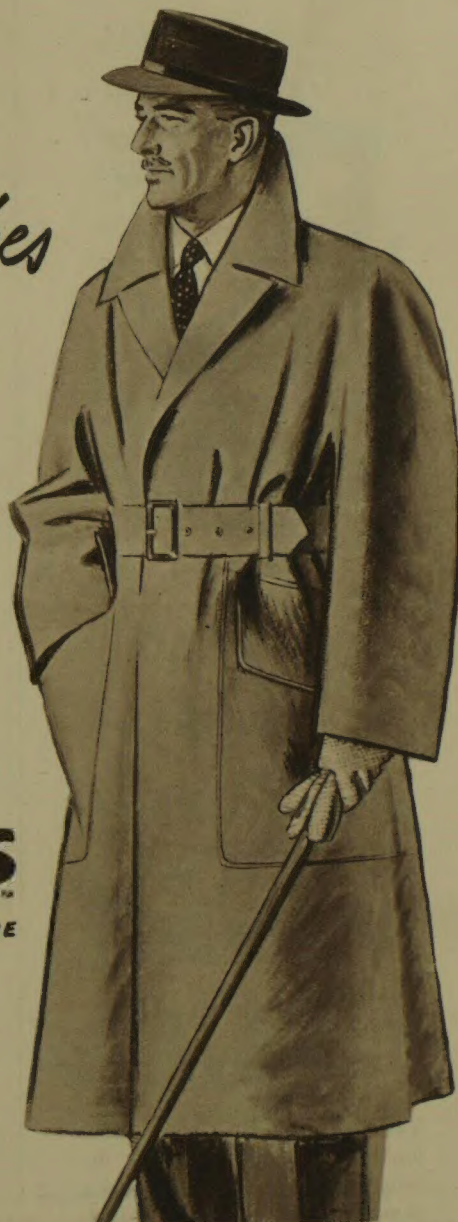
*Mackintoshes*

Completely waterproof, the Moss Bros Mackintosh is of good quality medium weight double texture cloth, well cut with large reinforced pockets, inset or raglan sleeves.

Available in all sizes. Also a wide range of gaberdine raincoats.

**MOSS BROS**  
OF COVENT GARDEN & CO. LTD.  
THE COMPLETE MAN'S STORE

Junction of  
Garrick and Bedford Streets, W.C.2  
Temple Bar 4477  
AND BRANCHES





# Valstar



**DISTINCTIVE  
WEATHERWEAR**

Trade Enquiries to

**VALSTAR LTD, SALFORD 6, LANCASHIRE**

Also at 314 REGENT STREET, LONDON, W.1

MANUFACTURERS OF HIGH GRADE WEATHERWEAR



THE MOST COMFORTING  
**NEWS**  
FOR YEARS!

## DUNLOPILLO

LONG LASTING COMFORT

### is back in the shops!

Why is Dunlopillo so much better than conventional mattresses? Here are the answers: Dunlopillo is latex foam, the pure milk of the rubber tree, which has been whisked into a foam and set. Its millions of tiny inter-connecting air-cells—self-ventilating in use—keep Dunlopillo cool, even in hot weather;

it gives ideal support to your body, is odourless, germ-resisting and does not create dust or fluff. You'll find Dunlopillo saves work, too, never needs turning or airing, and cannot sag or "bunch-up." Year after year your Dunlopillo mattress will stay as fresh and comfortable and shapely as the day it was bought.

Specimen Prices	Size 6' 0" or 6' 3" long	3' 0" wide	4' 6" wide
	The "Deep Six" (6" deep)	£17 . 4 . 2	£25 . 16 . 2
including P.T.	The "Famous Four" (4" deep)	£11 . 9 . 5	£17 . 4 . 2

**IMPORTANT** INSIST ON DUNLOPILLO  
the original latex foam

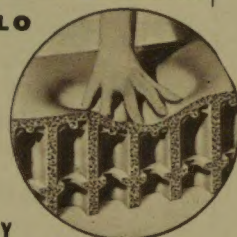
SEE THE NAME ON THE MATTRESS

Awarded the "Good Housekeeping" seal

Write for illustrated colour leaflet to:

Dunlop Rubber Co. Ltd. (Dunlopillo Div.), Rice Lane,  
Walton, Liverpool 9. London: 19/20 New Bond St., W.1.

**FOUNDERS OF THE LATEX FOAM INDUSTRY**



50D D36c



Twenty  
shillings  
a bottle

**LISTAN PALE  
Sherry**

You will relish this remarkable fine dry sherry and enjoy the delights to be found in its amber depths. Serve slightly chilled.

**"Glad you like this sherry  
—it's South African**

It's extremely good. I got some South African wine the other day . . .

I know. A good wine, but not of this quality.

Precisely, but why the difference?

Well, this is a truly representative South African wine. You see, though the Cape has been for centuries one of the world's finest wine countries, it couldn't compete in Britain with European countries until Empire wines got a duty preference twenty years ago. That bucked up the South African industry.

But why haven't we tasted such wines before?

Because really fine wines are achieved by selectivity, experiment and slow maturing. South Africa has done as much in twenty years with some wines as the Continent has in generations.

Only certain wines, then?

So far. All are good, but not all are fine. The improvement is naturally progressive.

Were South African wines well-known here before the preference twenty years ago?

Now you're delving into history. They used to be very popular. But in 1860 Mr. Gladstone removed the Colonial Preference and sent the South African wine industry into the wilderness.

Is that likely to happen again?

I hope not. Imperial Preference has encouraged the South African wine growers to tremendous efforts. The British Government is not likely to lead such an important Empire Industry up the garden again. It wouldn't make sense.

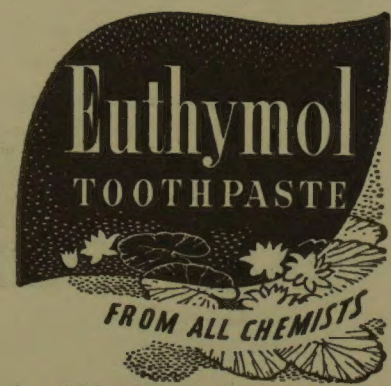
So we can look forward to several kinds of really fine wines from South Africa?

You certainly can, and very soon, too."

**SOUTH AFRICAN WINE FARMERS ASSOCIATION**  
(LONDON) LIMITED

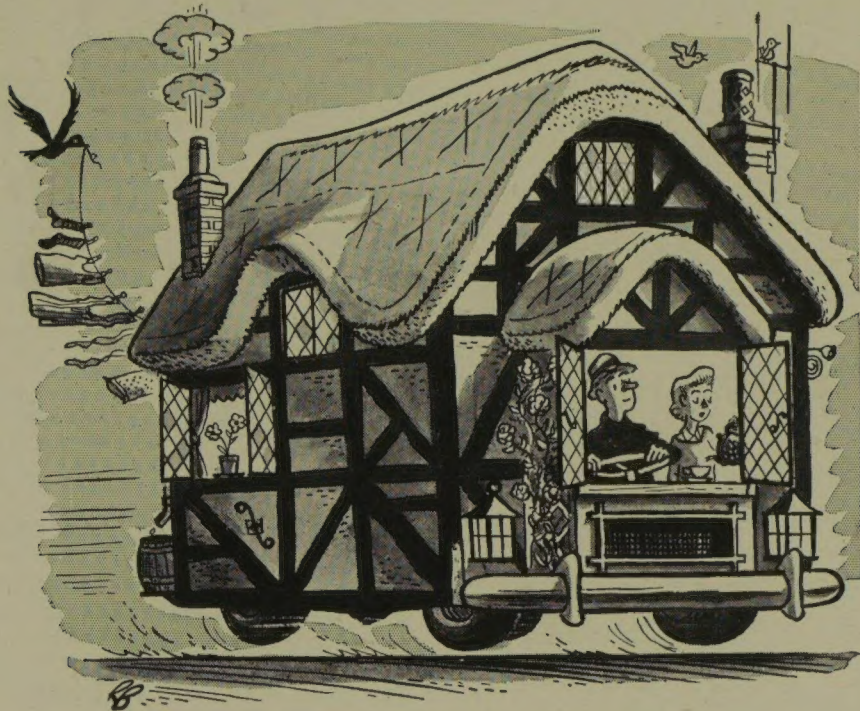


*For  
Morning  
Freshness*





# Motor how you will . . .



*I will give you*  
**MORE MILES PER GALLON!**

*says Mr. MERCURY*



**NATIONAL BENZOLE MIXTURE**



A GRAND 'LONG'  
WITH ICED WATER



THE BASIS OF A  
PERFECT 'SHORT'



*That's the long and short of it!*

**PERNOD**

*The Aperitif of France*

*Pernod fils*

Available in Bottles and Halves from leading Wine Merchants  
Sole importers: J. R. PARKINGTON & Co. Ltd., New Bond St., W.1



## Take care of your Hair

Rowland's Macassar Oil is made to a very special formula, which has stood the test of time. For since its introduction in 1793, Rowland's Macassar Oil has been the choice of discerning men and women. They have found—as you will find—that Rowland's is pre-eminent for caring for the hair; as a dressing that imparts sheen and gloss; as a tonic that promotes strong, natural growth. In two forms—Red for dark hair; Golden for fair.

—Since 1793

**ROWLAND'S  
MACASSAR OIL**

*the choice of discerning men & women*

## The Bond Street STAMP AUCTIONS



Over 3,000 leading collectors are regular bidders at the H. R. HARMER Stamp Auctions, providing a steady market for those who wish to sell—no matter whether a single rarity or a 20-volume collection.

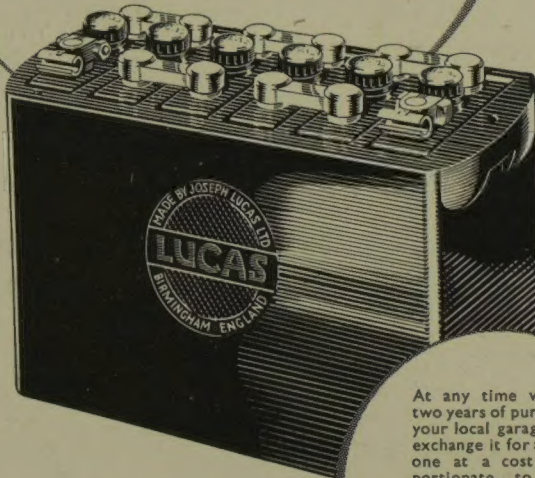
If you wish to buy, write for a Catalogue subscription form: New Season's sales commence this month, and many important collections will come under the hammer. Air-mail editions of catalogues are available for overseas bidders.

**H. R. HARMER LTD.**  
INTERNATIONAL STAMP AUCTIONEERS  
39-42 NEW BOND STREET, LONDON, W.1  
and at New York and Sydney (Tel. Mayfair 0218)

**2 YEARS  
INSURED LIFE**

WITH ALL CAR TYPE

**LUCAS  
BATTERIES**



*This scheme applies to the  
Home Market Only*

JOSEPH LUCAS LTD • BIRMINGHAM 19

At any time within two years of purchase your local garage can exchange it for a new one at a cost proportionate to the length of service. Ask your local garage for full details, or write for full list of agents and battery literature.

**say PATON'S**



because quality  
lasts longer  
— looks better

**PATON'S**  
*shoe and boot*  
**LACES**

Wm. Paton Ltd Johnstone Scotland





# This is the Gin



By Appointment  
Gin Distillers  
to H.M. King George VI

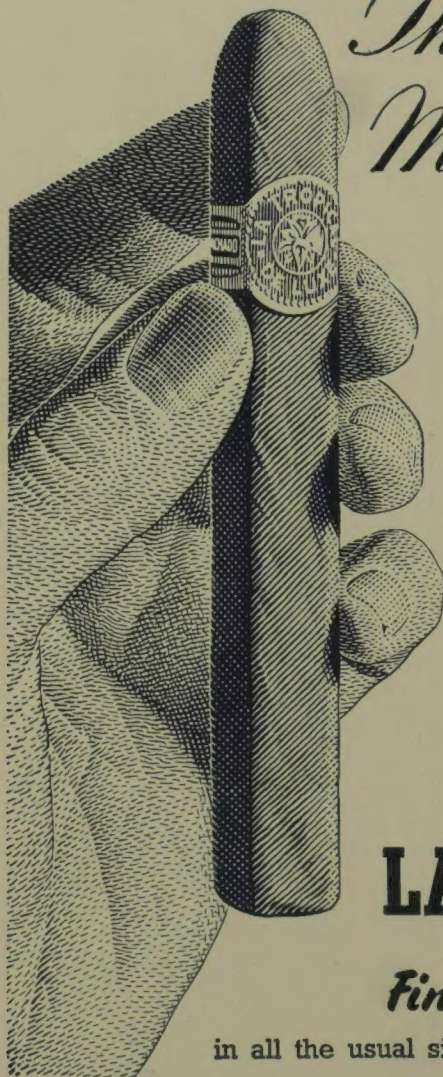
*Quality  
Incomparable*

# Gordon's

## Stands Supreme

Maximum Prices: Per bottle 32/4; Half bottle 16/11; Quarter bottle 8/10; Miniature 3/5. U.K. only.

*This is a  
Mild Cigar*



UNIQUELY MILD! . . .  
because, for all its mildness  
and delicacy of flavour it is  
full of Character—with that  
perfect balance of qualities  
achieved by the skill of  
Machado of Kingston,  
Jamaica, the firm with  
over 70 years' experience.

## LA TROPICAL

DE LUXE

*Finest Jamaica Cigars*

in all the usual sizes from 2/5 • Petitas 1/6

Sole Importers:

LAMBERT & BUTLER, BRANCH OF THE IMPERIAL TOBACCO COMPANY (of Great Britain & Ireland), LTD.

L.T. 137.

*In good Hotels they're saying . . .*



*Make friends  
with  
Martell*  
COGNAC

THREE STAR

CORDON BLEU